HYUNDAI BNG STEEL CO., LTD.

Separate Financial Statements

December 31, 2019 and 2018

HYUNDAI BNG STEEL CO., LTD.
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December 31, 2019 and 2018

Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of
HYUNDAI BNG STEEL CO., LTD.

Opinion

We have audited the accompanying separate financial statements of HYUNDAI BNG STEEL CO., LTD. (the "Company"), which comprise the separate statements of financial position as at December 31, 2019 and 2018, and the separate statements of comprehensive income, separate statements of changes in equity and separate statements of cash flows for the years then ended, and notes to the separate financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of the Company as at December 31, 2019 and 2018, and its separate financial performance and its separate cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS).

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment Assessment for Stainless Cold Rolled Steel Sheet Division Cash Generating Unit

Key Audit Matter

As explained in note 15, the Company's management determined that there was an indication of impairment as the carrying amount of net assets exceeded total market price as at December 31, 2019 and performed impairment assessments.

The Company identifies stainless cold rolled steel sheet division a key Cash Generating Unit (CGU). The Company's carrying amount of cold rolled steel sheet division CGU including property, plant and equipment are ₩ 369,855 million as at December 31, 2019.

We focused on this area because the assessment of the 'value in use' of CGU involves management's judgements about the future results of the business and the growth rates and the discount rates applied to future cash flow forecast, and the impacts on the separate financial statements are significant.

How our audit addressed the Key Audit Matter

We performed following audit procedures to address the key audit matter.

- Evaluated the adequacy of valuation model used by management to estimate value-in-use.
- Examined estimates of future cash flows is consistent with the financial forecast approved by management.
- Compared actual results for the year against the prior year's forecasts to evaluate whether any optimistic factors were included in forecasts process.
- Evaluated the eligibility and independence of an external specialist hired by the company
- Evaluated the reasonableness of key assumptions used to estimate value-in-use
    - Confirmed whether forecasts including revenue growth rates and operating profit rates of relevant CGU are consistent with previous performances and compared the actual performance of the current period with the estimates of the prior period.
    - Compared the economic and industrial forecasts with long-term growth rate
    - Compared the discount rates that are independently calculated using an observable information with the discount rates applied by management
- Evaluated the results of a sensitivity analysis on the discount rates and the perpetual growth rates performed by management to assess the impact of changes in key assumptions on the impairment tests.

Other Matter

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the separate financial statements in accordance with Korean IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Korean Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Tae-Ho Song, Certified Public Accountant.

Samil PricewaterhouseCoopers

Seoul, Korea
March 6, 2020

This report is effective as at March 6, 2020, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

HYUNDAI BNG STEEL CO., LTD.
Separate Statements of Financial Position
December 31, 2019 and 2018

(in Korean won)	Notes	2019	2018
Assets			
Current assets			
Cash and cash equivalents	7,8	₩ 45,555,393,499	₩ 47,687,257,346
Trade and other receivables	7,8,9,35	143,691,976,334	130,604,099,921
Other financial assets	7,8	25,169,649,547	7,122,895,937
Other current assets	12,28,35	5,495,101,531	1,723,016,192
Derivative financial assets	5,7,11	430,582,305	9,139,897
Inventories	13	141,773,155,562	167,659,052,253
		362,115,858,778	354,805,461,546
Non-current assets			
Trade and other receivables	7,8,9,35	-	945,668,974
Other financial assets	5,7,8,10	7,945,313,433	8,975,889,208
Derivative financial assets	5,7,11	614,544,281	-
Investments in a subsidiary and associates	14	203,720,000	203,720,000
Property, plant and equipment	15	183,415,848,671	184,206,755,139
Investment property	16	25,550,135,223	26,368,745,501
Intangible assets	17	15,427,388,820	14,985,580,005
Deferred tax assets	22	10,139,005,010	12,702,596,681
		243,295,955,438	248,388,955,508
Total assets		₩ 605,411,814,216	₩ 603,194,417,054
Liabilities			
Current liabilities			
Trade and other payables	4,7,18,35	₩ 60,431,289,786	₩ 66,154,397,624
Other financial liabilities	4,7,19	21,849,543,004	67,795,033,029
Other current liabilities	20,28,35	4,652,466,201	2,184,315,240
Derivative financial liabilities	4,5,7,11	43,121,177	-
Current tax liabilities		2,368,149,738	5,121,221,534
		89,344,569,906	141,254,967,427
Non-current liabilities			
Trade and other payables	4,7,18	753,284,579	241,098,663
Other financial liabilities	4,5,7,19	94,557,471,736	49,810,764,744
Derivative financial liabilities	4,5,7,11	1,838,358,570	-
Other provision	23,24	669,516,317	11,460,134,283
Net defined benefit liabilities	21	15,463,919,840	18,482,997,343
		113,282,551,042	79,994,995,033
Total liabilities		202,627,120,948	221,249,962,460
Equity			
Share capital	1,25	75,943,315,000	75,943,315,000
Capital surplus		992,775,657	992,775,657
Other components of equity	27	(360,406,269)	(50,965,475)
Retained earnings	26	326,209,008,880	305,059,329,412
Total equity		402,784,693,268	381,944,454,594
Total liabilities and equity		₩ 605,411,814,216	₩ 603,194,417,054

The above statements of financial position should be read in conjunction with the accompanying notes.

HYUNDAI BNG STEEL CO., LTD.
Separate Statements of Comprehensive Income
December 31, 2019 and 2018

(in Korean won)	**Notes**		**2019**		**2018**
Revenue	6,28,35	₩	732,816,554,346	₩	711,992,842,067
Cost of sales	29,35		659,811,067,708		644,302,750,946
Gross profit			73,005,486,638		67,690,091,121
Selling, general and administrative expenses	29,30,35		29,972,351,341		26,960,615,561
Distribution costs	35		6,649,889,809		5,888,535,402
Operating profit			36,383,245,488		34,840,940,158
Other income	31		8,351,423,479		8,401,542,148
Other expenses	31		14,222,904,267		11,761,009,790
Finance income	32,35		3,129,516,323		1,709,438,723
Finance costs	32,35		5,277,623,111		5,869,383,804
Profit before income tax			28,363,657,912		27,321,527,435
Income tax expense	22		6,685,906,628		8,000,450,187
Profit for the year			21,677,751,284		19,321,077,248
Other comprehensive income					
Items that will not be reclassified to profit or loss					
Remeasurements of net defined benefit liabilities	22		996,287,084		(870,549,373)
Loss on valuation of equity instruments at fair value through other comprehensive income	22		(309,440,794)		(62,958,346)
Other comprehensive income for the year, net of tax			686,846,290		(933,507,719)
Total comprehensive income for the year		₩	22,364,597,574	₩	18,387,569,529
Basic earnings per share attributable to the equity holders of the Company during the year					
Basic earnings per ordinary share	33	₩	1,427	₩	1,272
Basic earnings per preferred share	33		1,477		1,322

The above statements of comprehensive income should be read in conjunction with the accompanying notes.

HYUNDAI BNG STEEL CO., LTD.
Separate Statements of Changes in Equity
Years Ended December 31, 2019 and 2018

(in Korean won)	Share capital	Capital surplus	Other components of equity	Retained earnings	Total equity
Balance at January 1, 2018	₩ 75,943,315,000	₩ 992,775,657	₩ 11,992,871	₩ 288,133,160,437	₩ 365,081,243,965
Total comprehensive income :					
Profit for the year	-	-	-	19,321,077,248	19,321,077,248
Remeasurements of net defined benefit liabilities	-	-	-	(870,549,373)	(870,549,373)
Loss on valuation of equity instruments at fair value through other comprehensive income	-	-	(62,958,346)	-	(62,958,346)
Transactions with equity holders of the Company :					
Annual dividends	-	-	-	(1,524,358,900)	(1,524,358,900)
Balance at December 31, 2018	₩ 75,943,315,000	₩ 992,775,657	₩ (50,965,475)	₩ 305,059,329,412	₩ 381,944,454,594
Balance at January 1, 2019	₩ 75,943,315,000	₩ 992,775,657	₩ (50,965,475)	₩ 305,059,329,412	₩ 381,944,454,594
Total comprehensive income :					
Profit for the year	-	-	-	21,677,751,284	21,677,751,284
Remeasurements of net defined benefit liabilities	-	-	-	996,287,084	996,287,084
Loss on valuation of equity instruments at fair value through other comprehensive income	-	-	(309,440,794)	-	(309,440,794)
Transactions with equity holders of the Company :					
Annual dividends	-	-	-	(1,524,358,900)	(1,524,358,900)
Balance at December 31, 2019	₩ 75,943,315,000	₩ 992,775,657	₩ (360,406,269)	₩ 326,209,008,880	₩ 402,784,693,268

The above statements of changes in equity should be read in conjunction with the accompanying notes.

HYUNDAI BNG STEEL CO., LTD.
Separate Statements of Cash Flows
Years Ended December 31, 2019 and 2018

(in Korean won)	Notes		2019		2018
Cash flows from operating activities					
Cash generated from operations	34	₩	44,247,831,093	₩	19,789,298,671
Interest received			930,174,143		938,463,402
Interest paid			(2,945,249,798)		(3,150,584,228)
Income tax paid			(7,081,708,590)		(9,263,160,571)
Net cash inflow from operating activities			35,151,046,848		8,314,017,274
Cash flows from investing activities					
Increase in short-term financial instruments			(23,034,285,970)		(1,957,833,332)
Decrease in long-term financial instruments			-		2,000,000
Increase in long-term loans			(300,000,000)		-
Decrease in long-term loans			735,860,000		185,000,000
Proceeds from disposal of investment bonds			5,000,000,000		-
Acquisition of property, plant and equipment	15		(18,578,454,890)		(25,255,683,305)
Proceeds from sale of property, plant and equipment	15		18,902,337		19,771,450
Proceeds from disposal of investment property			1,898,670,150		-
Acquisition of intangible assets	17		(1,421,952,990)		(383,965,910)
Proceeds from sale of intangible assets			-		106,000,000
Increase in deposits provided			(9,845,000)		(431,000,000)
Decrease in deposits provided			144,000,000		105,000,000
Net cash outflow from investing activities			(35,547,106,363)		(27,610,711,097)
Cash flows from financing activities					
Increase in short-term borrowings			314,832,983,051		378,004,863,555
Repayments of short-term borrowings			(350,738,178,989)		(388,907,291,474)
Proceeds from issuance of bonds			29,848,320,000		49,755,340,000
Repayments of bonds			(30,000,000,000)		(30,000,000,000)
Payment of dividends			(1,524,358,900)		(1,524,358,900)
Increase in leasehold deposits			550,000,000		-
Repayments of lease liabilities	36		(141,900,000)		-
increase in long-term borrowings			35,520,000,000		-
Net cash inflow (outflow) from financing activities			(1,653,134,838)		7,328,553,181
Net decrease in cash and cash equivalents			(2,049,194,353)		(11,968,140,642)
Cash and cash equivalents at the beginning of year			47,687,257,346		59,705,799,445
Effects of exchange rate changes on cash and cash equivalents			(82,669,494)		(50,401,457)
Cash and cash equivalents at the end of year		₩	45,555,393,499	₩	47,687,257,346

The above statements of cash flows should be read in conjunction with the accompanying notes.

1. General Information

HYUNDAI BNG STEEL CO., LTD. (the "Company") was established on April 7, 1966, under the Commercial Law of the Republic of Korea, to manufacture and sell steel products. On March 15, 2002, the Company changed its name from Sammi Special Steel Co., Ltd. to BNG Steel Co., Ltd. and later changed its name to HYUNDAI BNG STEEL CO., LTD. on March 11, 2011 with the resolution at the shareholders' general meeting.

On March 24, 1987, the Company listed its stock on the Korea Exchange. As at December 31, 2019, the share capital of the Company amounts to ₩ 75,943 million after several capital increases and decreases, and the largest shareholder is Hyundai Steel Co., Ltd. with percentage of ownership of 41.12% (ordinary share).

2. Significant Accounting Policies

The principal accounting policies applied in the preparation of these separate financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of Preparation

The Company maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with the International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS). The accompanying separate financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Company's financial position, financial performance or cash flows, is not presented in the accompanying separate financial statements.

The Company's separate financial statements have been prepared in accordance with Korean-IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board ("IASB") that have been adopted by the Republic of Korea.

The financial statements have been prepared on a historical cost basis, except for the following:

· Certain financial assets and liabilities (including derivative instruments) and

· defined benefit pension plans – plan assets measured at fair value.

The preparation of separate financial statements requires the use of critical accounting estimates. Management also needs to exercise judgement in applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the separate financial statements are disclosed in Note 3.

2.2 Changes in Accounting Policies and Disclosures

(a) New and amended standards adopted by the Company

The Company has applied the following standards and amendments for the first time for their annual reporting period commencing January 1, 2019.

- Enactment of Korean IFRS 1116 *Leases*

Under the new standard, with implementation of a single lease model, lessee is required to recognize assets and liabilities for all lease which lease term is over 12 months and underlying assets are not low value assets. A lessee is required to recognize a right-of-use asset and a lease liability representing its obligation to make lease payments.

With implementation of Korean IFRS 1116 *Lease*, the Company has changed accounting policy. The Company has adopted Korean IFRS 1116 retrospectively, as permitted under the specific transitional provisions in the standard, and recognized the cumulative impact of initially applying the standard as at January 1, 2019, the date of initial application. The Company has not restated comparatives for the 2018 reporting period. The impact of the adoption of the leasing standard and the new accounting policies are disclosed in Note 36.

- Amendment to Korean IFRS 1109 *Financial Instruments – Prepayment Features with Negative Compensation*

The narrow-scope amendments made to Korean IFRS *1109 Financial Instruments* enable entities to measure certain prepayable financial assets with negative compensation at amortized cost. When a modification of a financial liability measured at amortized cost that does not result in the derecognition, a modification gain or loss shall be recognized in profit or loss. The amendment does not have a significant impact on the financial statements.

- Amendments to Korean IFRS 1019 *Employee Benefits –Amendment, Curtailment or Settlement of the Plan*

The amendments require that an entity shall calculate current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement based on updated actuarial assumptions from the date of the change. The amendments also require that a reduction in a surplus must be recognized in profit or loss even if that surplus was not previously recognized because of the impact of the asset ceiling. The amendment does not have a significant impact on the financial statements.

- Amendments to Korean IFRS 1028 *Investments in Associates and Joint Ventures – Long-term Interests in Associates and Joint Ventures*

The amendments clarify that an entity shall apply Korean IFRS 1109 to financial instruments in an associate or joint venture to which the equity method is not applied. The amendments also clarify that Korean IFRS 1109 requirements are applied to long-term interests that form part of the entity's net investment in an associate or joint venture before applying the impairment requirements of

Korean IFRS 1028. The amendment does not have a significant impact on the financial statements.

-Enactment to Interpretation of Korean IFRS 2123 *Uncertainty over Income Tax Treatments*

The interpretation explains how to recognize and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment, and includes guidance on how to determine whether each uncertain tax treatment is considered separately or together. It also presents examples of circumstances where a judgement or estimate is required to be reassessed. The enactment does not have a significant impact on the financial statements.

-Annual Improvements to Korean IFRS 2015 – 2017 Cycle:

· Amendments to Korean IFRS 1103 *Business Combination*

The amendments clarify that when a party to a joint arrangement obtains control of a business that is a joint operation, and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the transaction is a business combination achieved in stages. In such cases, the acquirer shall remeasure its entire previously held interest in the joint operation. The amendment does not have a significant impact on the financial statements.

· Amendments to Korean IFRS 1111 *Joint Agreements*

The amendments clarify that when a party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business. In such cases, previously held interests in the joint operation are not remeasured. The amendment does not have a significant impact on the financial statements.

· Amendments to Paragraph 57A of Korean IFRS 1012 *Income Tax*

The amendment is applied to all the income tax consequences of dividends and requires an entity to recognize the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized those past transactions or events. The amendment does not have a significant impact on the financial statements.

· Korean IFRS 1023 *Borrowing Costs*

The amendments clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use (or sale), it becomes part of general borrowings. The amendment does not have a significant impact on the financial statements.

(b) New standards and interpretations not yet adopted by the Company

The following new accounting standards and interpretations have been published that are not mandatory for December 31, 2019 reporting periods and have not been early adopted by the Company.

- Amendments to Korean IFRS 1001 *Presentation of Financial Statements* and Korean IFRS 1008 *Accounting policies, changes in accounting estimates and errors – Definition of Material*

The amendments clarify the explanation of the definition of material and amended Korean IFRS 1001 and Korean IFRS 1008 in accordance with the clarified definitions. Materiality is assessed by reference to omission or misstatement of material information as well as effects of immaterial information, and to the nature of the users when determining the information to be disclosed by the Company. These amendments should be applied for annual periods beginning on or after January 1, 2020, and earlier application of permitted. The Company does not expect that these amendments have a significant impact on the financial statements.

- Amendments to Korean IFRS 1103 *Business Combination – Definition of a Business*

To consider the integration of the required activities and assets as a business, the amended definition of a business requires an acquisition to include an input and a substantive process that together significantly contribute to the ability to create outputs and excludes economic benefits from the lower costs. An entity can apply a concentration test, an optional test, where substantially all of the fair value of gross assets acquired is concentrated in a single asset or a Company of similar assets, the assets acquired would not represent a business. These amendments should be applied for annual periods beginning on or after January 1, 2020, and earlier application of permitted. The Company does not expect that these amendments have a significant impact on the financial statements.

2.3 Subsidiaries, Joint Ventures, and Associates

The financial statements of the Company are the separate financial statements prepared in accordance with Korean IFRS 1027, Separate Financial Statements. Investments in subsidiaries are recognized at cost under the direct equity investment and joint ventures and associates are recognized at cost using equity method in accordance with Korean IFRS 1028. Investments in associates are accounted for using the equity method of accounting, after initially being recognized at cost. The portion of the subsequent changes in net assets of jointly controlled entities and associates is added to or deducted from the joint ventures and associates. Unrealized gains on transactions between the Company and its joint ventures and associates are eliminated to the extent of the Company’s interest in joint ventures and associates. If there is objective evidence of impairment for the investment in joint ventures and associates, the Company recognizes the difference between the recoverable amount of joint ventures and associates and its book amount as impairment loss. Dividends received from joint ventures and associates are reported as a deduction from the carrying amount of investments in joint ventures and associates. The Company recognizes dividend income from subsidiaries in profit or loss when its right to receive the dividend is established.

2.4 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the separate financial statements of each of the Company's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The separate financial statements are presented in Korean won, which is the Controlling Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within finance costs. All other foreign exchange gains and losses are presented in the statement of profit or loss within 'other income or other expenses'.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities held at fair value through other comprehensive income are recognized in other comprehensive income.

2.5 Financial Assets

(a) Classification

The Company classifies its financial assets in the following measurement categories:

- those to be measured at fair value through profit or loss
- those to be measured at fair value through other comprehensive income, and
- those to be measured at amortized cost.

The classification depends on the Company's business model for managing the financial assets and the contractual terms of the cash flows.

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Company reclassifies debt investments when, and only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, this will depend on whether the Company has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income. Changes in fair value of non-designated equity investment are recognized in profit or loss.

(b) Measurement

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

A. Debt instruments

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. The Company classifies its debt instruments into one of the following three measurement categories:

- Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in 'other income' using the effective interest rate method.

- Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is included in 'other income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'other income or expenses' and impairment losses are presented in 'other expenses'.

- Fair value through profit or loss: Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss and presented net in the statement of profit or loss within 'other income or expenses' in the year in which it arises.

B. Equity instruments

The Company subsequently measures all equity investments at fair value. Where the Company's management has elected to present fair value gains and losses on equity investments, which held for long-term investment or strategic purpose, in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'other income' when the right to receive payments is established.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'other income and expenses' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

(c) Impairment

The Company assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Company applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables. (Note 4.1.2 provides more detail of how the Company determines there has been a significant increase in credit risk.)

(d) Recognition and Derecognition

Regular way purchases and sales of financial assets are recognized or derecognized on trade-date, the date on which the Company commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Company has retained substantially all the risks and rewards of ownership of the transferred asset, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Company classified the financial liability as "other financial liabilities" in the statement of financial position (Note 9).

(e) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the statements of financial position where there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

2.6 Derivative Instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently re-measured at their fair value. Changes in the fair value of the derivatives that are not qualified for hedge accounting are recognized in the statement of comprehensive income within 'other non-operating income (expenses)' or 'finance income (costs)' based on the nature of transactions.

2.7 Trade Receivables

Trade receivables are recognized initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognized at fair value. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance. See Note 8.3 for further information about the Company’s accounting for trade receivables and Note 4.1.2 for a description of the Company’s impairment policies.

2.8 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the moving-weighted average method except for raw materials in transit.

2.9 Property, Plant and Equipment

Property, plant and equipment is stated at its cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditures that is directly attributable to the acquisition of the items.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate the difference between their cost and their residual values over their estimated useful lives, as follows:

	Estimated useful lives
Buildings and Structures	25 - 50 years
Machinery	10 - 20 years
Other	5 - 6 years

The depreciation method, residual values and useful lives of property, plant and equipment are reviewed at the end of each reporting period and, if appropriate, accounted for as changes in accounting estimates.

2.10 Borrowing Costs

Borrowing costs incurred in the acquisition or construction of a qualifying asset are capitalized in the period when it is prepared for its intended use, and investment income earned on the temporary investment of borrowings made specifically for the purpose obtaining a qualifying asset is deducted from the borrowing costs eligible for capitalization during the period. Other borrowing costs are recognized as expenses for the period in which they are incurred.

2.11 Intangible Assets

Intangible assets are stated at cost, which includes acquisition cost, production cost and other costs required to prepare the asset for its intended use. Intangible assets are included in goodwill, membership rights and other intangible assets. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the assets are expected to be utilized. Intangible assets with definite useful life that are amortized using the straight-line method over their estimated useful lives, are as follows:

	Estimated useful lives
Other intangible assets	5 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period. For intangible assets with indefinite useful lives, useful lives are reviewed annually, and if appropriate to change, it is treated as changes in accounting estimate.

2.12 Investment Property

Property held to earn rentals or for capital appreciation or both is classified as investment property. Investment property is measured initially at its cost. After recognition as an asset, investment property is carried at cost less accumulated depreciation and impairment losses. Investment property, except for land, is depreciated using the straight-line method over their useful lives from 25 to 50 years.

2.13 Impairment of Non-financial Assets

Goodwill or intangible assets with indefinite useful lives are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. Non-financial assets, other than goodwill, that suffered impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.14 Trade and Other Payables

These amounts represent liabilities for goods and services provided to the Company prior to the end of reporting period which are unpaid. The amounts are unsecured and are presented as current liabilities, unless payment is not due within 12 months after the reporting period.

2.15 Financial Liabilities

(a) Classification and measurement

The Company's financial liabilities at fair value through profit or loss are financial instruments held for trading. A financial liability is held for trading if it is incurred principally for the purpose of repurchasing in the near term. A derivative that is not a designated as hedging instruments and an embedded derivative that is separated are also classified as held for trading.

The Company classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and present as 'trade and other payables' and 'other financial liabilities' in the statement of financial position.

(b) Derecognition

Financial liabilities are removed from the statement of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

2.16 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Tax is recognized on the profit for the period in the statement of income, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period.

Management periodically evaluates tax policies that are applied in tax returns in which applicable tax regulation is subject to interpretation. The Company recognizes current income tax on the basis of the amount expected to be paid to the tax authorities.

Deferred tax is recognized for temporary differences arising between the tax bases of assets and liabilities and their carrying amounts as expected tax consequences at the recovery or settlement of the carrying amounts of the assets and liabilities. However, deferred tax assets and liabilities are not recognized if they arise from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting profit nor taxable profit or loss. Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized.

Deferred tax liability is recognized for taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, deferred tax asset is recognized for deductible temporary differences arising from such investments to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2.17 Employee Benefits

The Company operates both defined contribution and defined benefit pension plans.

For defined contribution plans, the Company pays contribution to publicly or privately administered pension insurance plans on mandatory, contractual or voluntary basis. The Company has no further payment obligation once the contribution have been paid. The contribution are recognized as employee benefit expense when they are due.

A defined benefit plan is a pension plan that is not a defined contribution plan. Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds and that have terms to maturity approximating to the terms of the related pension obligation. The remeasurements of the net defined benefit liability are recognized in other comprehensive income.

If any plan amendments, curtailments, or settlements occur, past service costs or any gains or losses on settlement are recognized as profit or loss for the year.

Certain entities within the Company provide long-term employee benefits that are entitled to employees with service period for 10 years and above. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Company recognizes service cost, net interest on other long-term employee benefits and remeasurements as profit or loss for the year. These liabilities are valued annually by an independent qualified actuary.

2.18 Provisions

Provisions are recognized when the Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

2.19 Revenue Recognition

(a) Identify performance obligation

The Company is engaged in the production and sales of various steel sheets and is a single operating segment. When applying Korean IFRS 1115, there are separate obligations to perform export sales contracts with customers: (1) sales of products, and (2) marine transportation services and insurance services. The timing of recognizing a Company's revenue may change depending on whether each performance obligation is fulfilled at one time or over a period of time. Since the Company is obligated to provide marine transportation and insurance services to customers during the term of the contract, the Company will recognize these obligations as separate income.

(b) Variable consideration

The Company operates a price compensation system for claims that are filed after delivery of the product to the customer. A price compensation system correspond to variable consideration in Korean IFRS 1115 and is estimated at the inception of the contract and must be reviewed at a later date. In applying IFRS 1115, the Company will estimate an amount of variable consideration by using the expected value method that the Company expects to better predict the amount of consideration to which it will be entitled and will recognize revenue with the transaction price only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur.

2.20 Lease

As explained in Note 2.2 above, the Company has changed its accounting policy for leases. The impact of the new accounting policies is disclosed in Note 36.

As at December 31, 2018, leases in which a significant portion of the risks and rewards of ownership were not transferred to the Company as lessee were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

The Company leases offices and others. Lease contracts are typically made for fixed periods of less than 1 year, but may have extension options as described in (a) below.

Contracts may contain both lease and non-lease components. The Company allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the Company is lessee, the Company applies the practical expedient which has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until the 2018 financial year, leases of property, plant and equipment were classified as either finance or operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

From January 1, 2019, leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Company.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date
- Amounts expected to be payable by the Company (the lessee) under residual value guarantees
- The exercise price of a purchase option if the Company (the lessee) is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the Company (the lessee) exercising that option

Also, measurement of lease liabilities includes lease payments to be paid based on reasonably certain extension options.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

To determine the incremental borrowing rate, the Company:

- reflects unsecured corporate bond rate considering the lease term and Company's credit rating.

The Company is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Company is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life. Although the Company elected to apply the revaluation model to its land and buildings that are presented in property, plant and equipment, the Company elected not to apply that revaluation model to buildings held by the Company that are presented in the right-of-use assets.

Payments associated with short-term leases of equipment and vehicles and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

(a) Extension options

Extension options are included in part of property leases. These terms are used to maximize operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Company and not by the respective lessor.

2.21 Government Grants

Government grants are recognized at their fair values when there is reasonable assurance that the grant will be received and the Company will comply with the conditions attaching to it. Government grants related to assets are presented by deducting the grants in arriving at the carrying amount of the assets, and grants related to income are deferred and presented by deducting the related expenses for the purpose of the government grants.

2.22 Operating Segments

Information of each operating segment is reported in a manner consistent with the business segment reporting provided to the chief operating decision-maker (Note 6). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors that makes strategic decisions.

2.23 Approval of Issuance of the Financial Statements

The issuance of the December 31, 2019 separate financial statements of the Company was approved by the Board of Directors on January 28, 2020, which is subject to change with approval at the annual shareholder's meeting.

3. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Company to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Company's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. As the resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Additional information of significant judgement and assumptions of certain items are included in relevant notes.

(a) Impairment of financial assets

The provision for impairment for financial assets are based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period (Note 4.1.2).

(b) Cash Generating Unit (CGU) and estimated goodwill impairment

The Company tests whether goodwill and cash generating unit (CGU) has suffered any impairment on an annual basis. The recoverable amount of a CGU is determined based on value-in-use calculations (Note 15,17).

(c) Income taxes

The Company's taxable income generated from these operations are subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (Note 22).

If certain portion of the taxable income is not used for investments or increase in wages or dividends in accordance with the *Tax System for Recirculation of Corporate Income*, the Company is liable to pay additional income tax calculated based on the tax laws. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new tax system. As the Company's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

(d) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period (Note 5).

(e) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 21).

(f) Lease

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Most extension options in offices and vehicles leases have not been included in the lease liability, because the Company could replace the assets without significant cost or business disruption. The lease term is reassessed if an option is actually exercised (or not exercised) or the Company becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

4. Financial Risk Management

4.1 Financial Risk Factors

The Company's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and price risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance.

Risk management is carried out by the finance team and the sales planning team in accordance with the Company's policies and they identify, evaluate and hedge financial risks through intimate co-operation with other teams within the Company.

4.1.1 Market risk

(a) Foreign exchange risk

The Company's payments on import, denominated in foreign currencies, exceed foreign currency denominated sales. Export sales are mainly transacted in US dollars, and certain Euro and the Japanese yen received are in general immediately exchanged into US dollars, and used for payments for imports. The Company is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar.

The Company's primarily foreign exchange risk management policy is to match the balance of foreign currency denominated receivables and payables in order to mitigate the associated foreign exchange risk arising. Secondarily, the Company manages foreign exchange risk to the level acceptable in comparison to the Company's financial performances.

With the objective to realize sound and stable financial structure, the Company ensures effective foreign exchange risk management by exchanging information on foreign exchange risk management with financial institutions and establishing foreign currency management controls prohibiting speculative foreign currency transactions.

At the end of the reporting periods, if the currency had weakened/strengthened by 5% against the US dollar and the Euro with all other variables held constant, pre-tax profit for the years would have been affected as follows:

(in thousands of Korean won)	**2019**	**2018**
Financial assets denominated in foreign currencies	₩17,715,803	₩26,222,488
Financial liabilities denominated in foreign currencies	38,380,468	26,273,764
Impact on pre-tax profit if exchange rates increase by 5%	(1,033,233)	(2,564)
Impact on pre-tax profit if exchange rates decrease by 5%	1,033,233	2,564

(b) Price risk

The Company is insignificantly exposed to price risk of equity securities classified as financial assets at fair value through other comprehensive income in statement of financial position. Equity securities held by the Company are not publicly traded.

Equity would increase/decrease as a result of gains/losses on equity securities classified as at fair value through other comprehensive income. If the price had increased or decreased by 10%, the Company's post-tax profit for the year and equity would have been increased or decreased by ₩ 95 million as at December 31, 2019.

(c) Interest rate risk

Interest rate risk may be defined as a risk that fair value recognized in the statement of financial position or future interest income/expense cash flows from investing and financing activities fluctuate because of changes in market interest rates and for the Company, such interest rate risk mainly arises in relation to variable interest borrowings. In order to mitigate uncertainty associated with the changes in interest rate and minimize finance costs, the Company maintains certain portion of borrowings at fixed rate. The Company also manages its cash flow interest rate risk by using floating-to-fixed interest rate swaps.

As at December 31, 2019, the total borrowings (including bonds payable) are ₩ 116,407 million, of which ₩ 81,673 million are at fixed rate.

Although the Company has floating rate borrowings amounting to ₩34,734 million, the Company is not exposed to interest rate risk as it enters into a currency interest rate swaps contract to collect the won amount and pay the foreign currency amount on the contract settlement date, pay the fixed interest rate and collect the variable rate on the future interest payment date and pay the won amount and receive the foreign currency amount on the maturity date.

4.1.2 Credit risk

(a) Risk management

Credit risk arises from the Company's regular transactions and investment activities when the counterparty fails to meet requirements. To manage those risks, the Company regularly re-evaluates financial creditability of the counterparty based on their financial position and past experiences, and holds collateral rights for the majority of the counterparty. In addition, the Company receives reports on recovery of financial assets and has follow up policies.

Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions. For banks and financial institutions, only independently rated parties with a minimum rating of 'A' are accepted. When opening a new deposits account which is open to credit risk, such as trust deposits, approvals of the director of finance department and CEO must be obtained.

(b) Security

For some trade receivables, the Company may obtain security in the form of guarantees or letters of credit, etc. which can be called upon if the counterparty is in default under the terms of the agreement.

(c) Impairment of financial assets

The Company has two types of financial assets that are subject to the expected credit loss model:

· trade receivables for sales of goods and provision of services and

· other financial assets carried at amortized cost.

While cash equivalents and contract assets are also subject to the impairment requirement, the identified impairment loss was immaterial.

A. Trade receivables and contract assets

The Company applies the simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Company has, therefore, concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

The expected loss rates are based on the payment profiles of sales over a period of 36 month before December 31, 2019, and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

There are no credit losses experienced over a period of 36 month before December 31, 2019.

Meanwhile, trade receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Company.

Impairment losses on trade receivables are presented as net impairment losses within impairment loss in the statement of comprehensive income. Subsequent recoveries of amounts previously written off are credited against the same line item.

B. Other financial assets amortized cost

Other financial assets at amortized cost include loans, other receivables and others.

Movements in loss allowance provision for the year ended December 31, 2019, are as follows:

(in thousands of Korean won)		**Other receivables and others**
Beginning balance	₩	45,580
Increase in loss allowance recognized in profit or loss during the year		-
Loss allowance written off (expiration of statue of limitation)		(28,665)
Ending balance	₩	16,915

All of the financial assets at amortized costs are considered to have low credit risk, and the loss allowance recognized during the period was, therefore, limited to 12 months expected losses. Other instruments are considered to be low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

(d) Impairment loss

Following losses are recognized in profit or loss in relation to impaired financial assets for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		**2019**		**2018**
Other financial assets	₩	-	₩	16,914

(e) Financial assets at fair value through profit or loss

The Company is also exposed to credit risk in relation to debt investments that are measured at fair value through profit or loss. The maximum exposure at the end of the reporting period is the carrying amount of these investments (2019: ₩ 17,028 million, 2018: 825 million).

4.1.3 Liquidity risk

The Company is exposed to liquidity risks which may arise when financial liabilities are settled by delivering cash or other financial instruments. The Company maintains short-term and long-term liquidity management plans, constantly monitors difference between budget and the actual amount of cash outflows that the Company is able to match the term structure of financial liabilities and financial assets.

At the end of the reporting period, the Company held borrowing facilities limits of ₩ 198,000 million and USD 46,000 thousand (2018: ₩ 196,000 million and USD 60,000 thousand) that are expected to readily generate cash inflows for managing liquidity risk.

Management monitors rolling forecasts of the Company's cash and cash equivalents on the basis of expected cash flows and undrawn borrowing facilities. This is generally carried out in accordance with practice and limits set by the Company. These limits vary by location to take into account the liquidity of the market in which the entity operates. In addition, the Company's liquidity management policy involves monitoring liquidity ratios against internal and external regulatory requirements and maintaining debt financing plans.

The analyses of the Company's liquidity risk as at December 31, 2019 and 2018, are as follows. The amounts disclosed in the table are the contractual undiscounted cash flows and include interest amount at face value.

(in thousands of Korean won)	2019			
	Less than 1 year	Between 1 year and 5 years	Over 5 years	Total
Trade and other payables	₩ 60,431,290	₩ 390,000	₩ 363,285	₩ 61,184,575
Other financial liabilities	24,697,877	97,600,641	-	122,298,518
Derivative financial liabilities	43,121	1,838,359	-	1,881,480
	₩ 85,172,288	₩ 99,829,000	₩ 363,285	₩ 185,364,573

(in thousands of Korean won)	2018			
	Less than 1 year	Between 1 year and 5 years	Over 5 years	Total
Trade and other payables	₩ 66,154,398	₩ -	₩ 241,099	₩ 66,395,497
Other financial liabilities	69,388,800	51,463,829	-	120,852,629
	₩ 135,543,198	₩ 51,463,829	₩ 241,099	₩ 187,248,126

4.2 Capital Risk Management

The Company's objective in managing capital is to maintain a sound capital structure. The Company monitors capital on the basis of the debt ratio. This ratio is calculated as total liabilities divided by total capital.

(in thousands of Korean won)		2019		2018
Total liabilities (a)	₩	202,627,121	₩	221,249,962
Total capital (b)		402,784,693		381,944,455
Debt ratio (a/b)		50.3%		57.9%

5. Fair Value

5.1 Fair Value of Financial Instruments by Category

Carrying amount and fair value of financial instruments by category as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities				
Bonds	79,779,719	81,040,379	79,802,557	80,271,165

Financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income, financial assets and liabilities at amortized costs, derivative financial assets and liabilities excluding the above financial liabilities have the same carrying amount and fair value.

5.2 Fair Value Hierarchy

Items that are measured at fair value or for which the fair value is disclosed are categorized by the fair value hierarchy levels, and the defined levels are as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1).
- All inputs other than quoted prices included in level 1 that are observable (either directly that is, prices, or indirectly that is, derived from prices) for the asset or liability (Level 2).
- Fair value with unobservable inputs for the asset or liability (Level 3).

Fair value hierarchy classifications of the financial assets and financial liabilities that are measured at fair value as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	**2019**			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements				
Financial assets at fair value through profit or loss	₩ -	₩ 17,028,439	₩ -	₩ 17,028,439
Financial assets at fair value through other comprehensive income	-	-	1,230,905	1,230,905
Derivative financial assets	-	1,045,127	-	1,045,127
Derivative financial liabilities	-	1,881,480	-	1,881,480

(in thousands of Korean won)	**2018**			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements				
Financial assets at fair value through profit or loss	₩ -	₩ -	₩ 824,937	₩ 824,937
Financial assets at fair value through other comprehensive income	-	-	880,029	880,029
Derivative financial assets	-	9,140	-	9,140

5.3 Valuation Techniques and the Inputs

Valuation techniques and inputs used in levels 2 and 3 fair value measurements, are as follows:

(in thousands of Korean won)	**2019**			
	Fair value	**Level**	**Valuation techniques**	**Level 3 Inputs**
Financial assets at fair value through profit or loss				
MMF and MMW	₩ 17,028,439	2	Market approach	N/A
Financial assets at fair value through other comprehensive income				
Equity investments	1,230,905	3	Income approach	Discount rate
Derivative financial assets				
Currency and interest rate swaps	1,045,127	2	Profit approach	N/A

(in thousands of Korean won)		2018			
		Fair value	**Level**	**Valuation techniques**	**Level 3 Inputs**
Financial assets at fair value through profit or loss					
Equity investments[1]	₩	824,937	3	Income approach	Price volatility
Equity instruments at fair value through other comprehensive income					
Equity investments		880,029	3	Income approach	Discount rate
Derivative financial assets					
Currency forward		9,140	2	Profit approach	N/A

[1] Amounts include conversion right of redeemable convertible preference shares.

5.4 Valuation Processes for Fair Value Measurements Categorized Within Level 3

The Company operates an accounting team that performs the fair value measurements required for financial reporting purposes, including level 3 fair values. This team reports directly to the chief financial officer (CFO) and discusses valuation processes and results with the CFO at least once every quarter in line with the Company’s quarterly reporting dates.

5.5 Sensitivity analysis for Recurring Fair Value Measurements Categorized Within Level 3

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by the unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the most favorable or most unfavorable amounts are presented.

The results of the sensitivity analysis for the effect on pre-tax profit or loss from changes in inputs for each financial instrument that categorized as Level 3 and subject to sensitivity analysis, are as follows:

(in thousands of Korean won)		2019		
		Favourable changes		**Unfavourable changes**
Financial assets				
Equity instruments at fair value through other comprehensive income[1]	₩	164,588	₩	(156,991)
Equity instruments at fair value through other comprehensive income[2]		9,867		(8,267)

[1] Changes in their fair value are calculated by increasing or decreasing discount rate by 0.2 % which is a significant unobservable input.

[2] Changes in their fair value are calculated by increasing or decreasing discount rate by 1 %, which is a significant unobservable input.

(in thousands of Korean won)	2018			
	Favourable changes		**Unfavourable changes**	
Financial assets				
Financial assets at fair value through profit or loss[1]	₩	29,200	₩	(17,667)
Equity instruments at fair value through other comprehensive income[2]		438,213		(390,775)

[1] Changes in their fair value are calculated by increasing or decreasing price volatility by 10 %, which is a significant unobservable input.

[2] Changes in their fair value are calculated by increasing or decreasing discount rate by 0.5 %, which is a significant unobservable input.

6. Operating Segment Information

6.1 Segment Information

According to Korean IFRS 1108 *Operating Segments*, the Company is categorized as a single reportable segment; therefore, a separate segment reporting is not required. Reporting reviewed regularly by the chief operating decision-maker is measured in a manner consistent with the separate financial statements.

6.2 Entity-wide disclosures

Revenue by geographical regions for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Domestic sales	₩	625,822,512	₩	584,051,773
Export		106,994,042		127,941,069
	₩	732,816,554	₩	711,992,842

Details of external customers, who contribute more than 10% of the Company's total revenue for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019			2018		
		Revenue	**Ratio**		**Revenue**	**Ratio**
Customer 1	₩	95,449,640	13.03%	₩	106,358,439	14.9%

7. Financial Instruments by Category

Categorizations of financial instruments as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019				
	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at amortized cost	Derivatives	Total
Cash and cash equivalents	₩ -	₩ -	₩ 45,555,394	₩ -	₩ 45,555,394
Trade and other receivables (current)	-	-	143,691,976	-	143,691,976
Other financial assets (current)	17,028,439	-	8,141,210	-	25,169,649
Other financial assets (non-current)	-	1,230,905	6,714,408	-	7,945,313
Derivative financial assets (current)	-	-	-	430,582	430,582
Derivative financial assets (non-current)	-	-	-	614,544	614,544
	₩ 17,028,439	₩ 1,230,905	₩ 204,102,988	₩ 1,045,126	₩ 223,407,458

(in thousands of Korean won)	2018				
	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at amortized cost	Derivatives	Total
Cash and cash equivalents	₩ -	₩ -	₩ 47,687,257	₩ -	₩ 47,687,257
Trade and other receivables (current)	-	-	130,604,100	-	130,604,100
Trade and other receivables (non-current)	-	-	945,669	-	945,669
Other financial assets (current)	-	-	7,122,896	-	7,122,896
Other financial assets (non-current)	824,937	880,029	7,270,923	-	8,975,889
Derivative financial assets	-	-	-	9,140	9,140
	₩ 824,937	₩ 880,029	₩ 193,630,845	₩ 9,140	₩ 195,344,951

(in thousands of Korean won)	2019					
	Financial liabilities at amortized cost[1]		**Derivatives**		**Total**	
Trade and other payables (current)	₩	60,431,290	₩	-	₩	60,431,290
Trade and other payables (non-current)		753,285		-		753,285
Other financial liabilities (current)[1]		21,849,543		-		21,849,543
Other financial liabilities (non-current)		94,557,472		-		94,557,472
Derivative financial liabilities (current)		-		43,121		43,121
Derivative financial liabilities (non-current)		-		1,838,359		1,838,359
	₩	177,591,590	₩	1,881,480	₩	179,473,070

[1] Include financial liabilities related to transfer transactions, which is not qualified for derecognition.

(in thousands of Korean won)	2018	
	Financial liabilities at amortized cost[1]	
Trade and other payables (current)	₩	66,154,398
Trade and other payables (non-current)		241,099
Other financial liabilities (current)[1]		67,795,033
Other financial liabilities (non-current)		49,810,765
	₩	184,001,295

[1] Include financial liabilities related to transfer transactions, which is not qualified for derecognition.

Net gains or losses on each category of financial instruments for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		**2019**		**2018**
Equity instruments at fair value through other comprehensive income				
Gain (loss) on valuation (other comprehensive income)	₩	(309,441)	₩	(62,958)
Financial instruments at fair value through profit or loss				
Gain (loss) on valuation		36,320		-
Gain (loss) on disposal		(71,667)		-
Loans and receivables				
Interest income		1,144,379		1,098,914
Gain on foreign currency translations		11,781		59,378
Loss on foreign currency translations		(159,943)		(146,421)
Gain on foreign currency transactions		1,697,971		2,905,926
Loss on foreign currency transactions		(951,606)		(845,453)
Loss on disposal		(471,896)		(557,813)
Other impairment on receivables		-		(16,915)
Financial liabilities carried at amortized cost				
Interest expense		(3,110,295)		(3,287,461)
Gain on foreign currency translations		831,361		198,989
Loss on foreign currency translations		(1,387)		(3,503)
Gain on foreign currency transactions		1,445,707		1,219,754
Loss on foreign currency transactions		(1,960,703)		(3,819,016)
Derivative financial instruments				
Gain (loss) on derivative instruments valuation (profit or loss)		(836,353)		9,140
Gain on derivative instruments transactions (profit or loss)		416,536		1,559,120

8. Financial Assets

8.1 Financial Assets at Fair Value through Profit or Loss

(in thousands of Korean won)	2019		2018	
Current				
Beneficiary securities				
MMF	₩	1,998,491	₩	-
MMW		15,029,948		-
Non-current				
Non-listed redeemable convertible preferred shares				
Saltlux Inc.[1]		-		824,937
	₩	17,028,439	₩	824,937

[1] The Company exercised its conversion right to convert into ordinary shares and classified it as equity instruments at fair value through other comprehensive income for the year ended December 31, 2019.

8.2 Equity Investments at Fair Value through Other Comprehensive Income

(in thousands of Korean won)	2019		2018	
Non-current				
Non-listed shares				
Saltlux Inc.[1]	₩	753,270	₩	-
Ad Stainless Co.,[2]		453,200		855,594
S&M MEDIA CO., LTD.		20,000		20,000
Kyungnam Shinmun Co., Ltd.		4,435		4,435
	₩	1,230,905	₩	880,029

[1] The Company exercised its conversion right to convert into ordinary shares and classified it as equity instruments at fair value through other comprehensive income for the year ended December 31, 2019.

[2] There is no change in the number of shares held and the Company recognized valuation loss of ₩ 402 million in the current year.

Upon disposal of these financial assets, any balance within the accumulated other comprehensive income for these financial assets is reclassified to retained earnings and is not reclassified to profit or loss.

8.3 Trade Receivables and Other Financial Assets at Amortized Cost

(a) Trade receivables and provision for impairment

(in thousands of Korean won)		2019		2018
Trade receivables	₩	142,386,713	₩	131,402,173
Less: provision for impairment		-		(237,762)
Trade receivables - net	₩	142,386,713	₩	131,164,411

The Company has transferred trade receivables amounting to ₩ 1,873 million to a bank in exchange for cash as at December 31, 2019. The Company may retain an obligation to compensate a financial institution for debtors' failure to make payment when they become due, an obligation known as a 'recourse obligation'. Recourse obligations related to the sales of receivables with recourse are accounted for as collateralized borrowings.

(b) Other financial assets at amortized cost

(in thousands of Korean won)	2019			2018		
	Current	Non-current	Total	Current	Non-current	Total
Loans	₩ 120,000	₩ 170,000	₩ 290,000	₩ -	₩ 725,860	₩ 725,860
Investment bonds	-	-	-	5,000,000	-	5,000,000
Other receivables	1,322,179	-	1,322,179	430,939	-	430,939
Other financial assets	8,021,210	6,544,408	14,565,618	2,122,896	6,545,063	8,667,959
	9,463,389	6,714,408	16,177,797	7,553,835	7,270,923	14,824,758
Less: provision for impairment	(16,915)	-	(16,915)	(45,580)	-	(45,580)
	₩ 9,446,474	₩ 6,714,408	₩ 16,160,882	₩ 7,508,255	₩ 7,270,923	₩ 14,779,178

(c) Impairment

See Note 4.1.2 for the impairment of trade receivables, other financial assets at amortized cost and the Company's exposure to credit risk.

9. Transfer of Financial Assets

Under factoring arrangement, the Company transferred trade receivables at a discount to the financial institutions for the year ended December 31, 2019. The Company may retain an obligation to compensate a financial institution for debtors' failure to make payment when they become due, an obligation known as a 'recourse obligation'. Recourse obligations related to the sales of receivables with recourse are accounted for as collateralized borrowings.

(in thousands of Korean won)		2019		2018
Carrying amount of assets	₩	1,873,296	₩	3,194,297
Carrying amount of the associated liabilities		(1,873,296)		(3,194,297)

The Company transferred trade receivables to financial institutions for ₩ 29,664 million and USD 25,598 thousand and derecognized the trade receivables from the financial statements as substantially all the risks and rewards are transferred. In the course of transfer, the Company recognized a loss on disposal for ₩ 472 million.

10. Restricted Financial Instruments

Details of restricted financial instruments as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Special deposits (Long-term financial instruments)	₩	2,500	₩	2,500

11. Derivative Financial Instruments

Details of derivative financial instruments as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019		2018	
	Asset	Liability	Asset	Liability
Currency forward	₩ -	₩ 43,121	₩ 9,140	₩ -
Currency interest rate swaps	1,045,127	1,838,359	-	-
	1,045,127	1,881,480	₩ 9,140	₩ -

As at December 31, 2019, the Company has entered into 18 currency forward and currency interest rate swaps contracts amounting to USD 38,341,880.73 to hedge the risk of foreign currency fluctuation of receivables and payables denominated in foreign currency. The Company does not apply the hedge accounting.

12. Other Current Assets

Details of other current assets as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Advance payments	₩	4,115,184	₩	1,279,968
Prepaid expenses		1,026,008		318,486
Prepaid value added taxes		353,910		124,562
	₩	5,495,102	₩	1,723,016

13. Inventories

Details of inventories as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019					
	Amount before valuation		Valuation allowance		Net	
Merchandise	₩	19,533,215	₩	(313,656)	₩	19,219,559
Finished goods		41,924,998		(776,332)		41,148,666
Work-in-process		16,287,200		(456,538)		15,830,662
Raw materials		48,953,926		(595,191)		48,358,735
Supplies		17,347,048		(2,312,246)		15,034,802
Materials in transit		2,180,732		-		2,180,732
	₩	146,227,119	₩	(4,453,963)	₩	141,773,156

(in thousands of Korean won)	2018					
	Amount before valuation		Valuation allowance		Net	
Merchandise	₩	18,792,855	₩	(611,364)	₩	18,181,491
Finished goods		46,631,964		(1,298,374)		45,333,590
Work-in-process		20,392,616		(584,969)		19,807,647
Raw materials		50,612,617		(2,568,142)		48,044,475
Supplies		16,403,401		(1,569,058)		14,834,343
Materials in transit		21,457,506		-		21,457,506
	₩	174,290,959	₩	(6,631,907)	₩	167,659,052

The cost of inventories recognized as expense and included in ‘cost of sales’ amounts to ₩ 604,616 million in 2019 (2018: ₩ 569,078 million).

Changes in allowance for loss on inventory valuation for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Beginning	₩	6,631,907	₩	5,534,210
Loss on valuation (reversal)		(2,177,944)		1,097,697
Ending	₩	4,453,963	₩	6,631,907

14. Investments in a Subsidiary

The Company's investments in a subsidiary as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)			2019			2018		
	Country	**Financial statement date**	**Ownership ratio (%)**		**Carrying amount**	**Ownership ratio (%)**		**Carrying amount**
HYUNDAI BNG STEEL USA, INC.	U.S.A	December 31	100	₩	203,720	100	₩	203,720

Investments in subsidiaries, which are valued using the cost method, have not been changed during 2019.

Summary of condensed financial information of subsidiaries as at and for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019						
		Current assets		**Non-current assets**		**Current liabilities**		**Non-current liabilities**
HYUNDAI BNG STEEL USA, INC.	₩	3,133,254	₩	342,098	₩	2,820,497	₩	262,459

(in thousands of Korean won)		2019						
		Sales		**Net profit**		**Other comprehensive income**		**Total comprehensive income**
HYUNDAI BNG STEEL USA, INC.	₩	997,579	₩	97,730	₩	9,468	₩	107,198

(in thousands of Korean won)	2018			
	Current assets	**Non-current assets**	**Current liabilities**	**Non-current liabilities**
HYUNDAI BNG STEEL USA, INC.	₩ 3,344,002	₩ -	₩ 2,387,945	₩ 670,860

(in thousands of Korean won)	2018			
	Sales	**Net profit**	**Other comprehensive income**	**Total comprehensive income**
HYUNDAI BNG STEEL USA, INC.	₩ 1,216,967	₩ 119,881	₩ 8,763	₩ 128,644

15. Property, Plant and Equipment

Details of property, plant and equipment as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019						
	Land	**Buildings and Structures**	**Machinery**	**Others**	**Machinery in transit**	**Construction in-progress**	**Total**
Acquisition cost	₩ 49,377,419	₩ 74,418,444	₩ 321,810,828	₩ 19,674,832	₩ 371,720	₩ 22,344	₩ 465,675,587
Accumulated depreciation and impairment losses	-	(23,769,994)	(248,848,488)	(9,641,256)	-	-	(282,259,738)
	₩ 49,377,419	₩ 50,648,450	₩ 72,962,340	₩ 10,033,576	₩ 371,720	₩ 22,344	₩ 183,415,849

(in thousands of Korean won)	2018						
	Land	**Buildings and Structures**	**Machinery**	**Others**	**Machinery in transit**	**Construction in-progress**	**Total**
Acquisition cost	₩ 49,377,419	₩ 62,013,411	₩ 313,831,727	₩ 11,761,576	₩ 80,380	₩ 9,014,532	₩ 446,079,045
Accumulated depreciation and impairment losses	-	(21,240,454)	(231,238,719)	(9,393,117)	-	-	(261,872,290)
	₩ 49,377,419	₩ 40,772,957	₩ 82,593,008	₩ 2,368,459	₩ 80,380	₩ 9,014,532	₩ 184,206,755

Changes in property, plant and equipment for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019							
	Land	**Buildings and Structures**	**Machinery**	**Others**	**Machinery in transit**	**Right-of-use assets**	**Construction in-progress**	**Total**
Beginning	₩ 49,377,419	₩ 40,772,957	₩ 82,593,008	₩ 2,368,459	₩ 80,380	₩ -	₩ 9,014,532	₩ 184,206,755
Acquisition	-	148,334	51,819	7,202,109	737,320	146,934	14,773,570	23,060,086
Changes in Accounting Policies (Note 36)	-	-	-	-	-	301,215	-	301,215
Reclassification[1]	-	12,353,544	9,907,318	1,635,492	(445,980)	-	(23,765,758)	(315,384)
Disposal	-	(9,816)	(533,643)	(203)	-	(310,364)	-	(854,026)
Depreciation	-	(1,594,186)	(11,750,818)	(1,172,281)	-	(137,785)	-	(14,655,070)
Impairment[2]	-	(1,022,383)	(7,305,344)	-	-	-	-	(8,327,727)
Ending	₩ 49,377,419	₩ 50,648,450	₩ 72,962,340	₩ 10,033,576	₩ 371,720	₩ -	₩ 22,344	₩ 183,415,849

[1] Some of the construction in progress reclassified to investment property and consumables.

[2] The Company recognized impairment loss on property, plant and equipment related to discontinued production line by estimating recoverable amount as a part of production facilities rationalization amounting to ₩ 8,328 million as other expenses for the year ended December 31, 2019.

(in thousands of Korean won)	2018						
	Land	**Buildings and Structures**	**Machinery**	**Others**	**Machinery in transit**	**Construction in-progress**	**Total**
Beginning	₩ 41,098,680	₩ 41,948,068	₩ 89,866,303	₩ 2,878,916	₩ 4,218,232	₩ 1,012,953	₩ 181,023,152
Acquisition	8,278,739	59,036	2,563,901	371,143	1,347,684	12,242,538	24,863,041
Reclassification[1]	-	351,264	8,928,996	289,692	(5,485,536)	(4,240,959)	(156,543)
Disposal	-	(28,034)	(131,295)	(1)	-	-	(159,330)
Depreciation	-	(1,520,955)	(14,836,522)	(1,171,291)	-	-	(17,528,768)
Impairment[2]	-	(36,422)	(3,798,375)	-	-	-	(3,834,797)
Ending	₩ 49,377,419	₩ 40,772,957	₩ 82,593,008	₩ 2,368,459	₩ 80,380	₩ 9,014,532	₩ 184,206,755

[1] Reclassification to inventories.

[2] The Company recognized impairment loss on property, plant and equipment related to discontinued production line by estimating recoverable amount as a part of production facilities rationalization amounting to ₩ 3,835 as other expenses for the year ended December 31, 2018.

Depreciation expense (including depreciation of right-of-use assets) of ₩ 12,737 million (2018: ₩ 16,719 million) and ₩ 1,918 million (2018: ₩ 810 million) has been included in 'cost of sales' and 'selling and administrative expenses', respectively.

Impairment Tests for Cash Generating Unit (CGU)

The Company determined that there was an indication of impairment as the carrying amount of net assets exceeded total market price as at December 31, 2019 and conducted impairment tests for Cash Generating Unit(CGU).
The Company identifies stainless cold-rolled steel sheet segment and automotive components segment as CGU and reviews the recoverable amounts based on value-in-use.

The recoverable amounts for all CGU are determined based on value in use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the permanent growth rates stated below.

Key assumptions of stainless cold-rolled steel sheet segment CGU on which the property, plant and equipment are applied and the perpetual growth rates and discount rates used in value-in-use calculation are as follows:

(in thousands of Korean won)

	Key assumptions
Sales volume (% annual growth rate)	0.88%
Sales price (% annual growth rate)	(-)0.09%
Gross margin (% of revenue)	9.68% ~ 9.93%
Other operating costs	33,860,320
Perpetual growth rates	-%
Pre-tax discount rates	9.67%

Sales volume is the average annual growth rate over the five-year forecast period. It is based on past performance and management's expectations of market development.

Sales price is the average annual growth rate over the five-year forecast period. It is based on current industry trends.

Gross margin is the average margin as a percentage of revenue over the five-year forecast period. It is based on the current sales margin levels and sales mix, with adjustments made to reflect the expected future price increases of raw materials, which management does not expect to pass on to customers through price increases.

Other operating costs are the fixed costs of the CGUs. Management forecasts these costs based on the current structure of the business, adjusting for inflationary increases and these do not reflect any future restructurings or cost saving measures. The amounts disclosed above are the average operating costs for the five-year forecast period.

Perpetual growth rate is the weighted average growth rate used to extrapolate cash flows beyond the budget period.

Pre-tax discount rates reflect specific risks relating to the relevant segments in which they operate.

The impairment test suggests that the carrying amount of cash generating units does not exceed the recoverable amount.

Operating lease

Details of operating lease as at December 31, 2019 and 2018, are as follows:

The Company leases the office for Seoul Office under non-cancellable operating leases and the lease contract period is one year.

Commitments for minimum lease payments in relation to major non-cancellable operating leases are payable as follows:

(in thousands of Korean won)	**2019**	**2018**
Within one year	₩ 808,425	₩ 499,937

16. Investment Property

Details of investment property as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	**2019**		
	Land	**Building**	**Total**
Acquisition cost	₩ 21,253,861	₩ 7,899,235	₩ 29,153,096
Accumulated depreciation and impairment losses	-	(3,602,961)	(3,602,961)
	₩ 21,253,861	₩ 4,296,274	₩ 25,550,135

(in thousands of Korean won)	**2018**		
	Land	**Building**	**Total**
Acquisition cost	₩ 22,088,083	₩ 7,593,391	₩ 29,681,474
Accumulated depreciation and impairment losses	-	(3,312,728)	(3,312,728)
	₩ 22,088,083	₩ 4,280,663	₩ 26,368,746

Changes in investment property for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019		
	Land	**Building**	**Total**
Beginning	₩ 22,088,083	₩ 4,280,663	₩ 26,368,746
Acquisition[1]	-	124,000	124,000
Reclassification[2]	-	50,461	50,461
Depreciation	-	(158,851)	(158,851)
Disposal[3]	(834,221)	-	(834,221)
Ending	₩ 21,253,862	₩ 4,296,273	₩ 25,550,135

(in thousands of Korean won)	2018		
	Land	**Building**	**Total**
Beginning	₩ 22,088,083	₩ 4,438,067	₩ 26,526,150
Reclassification	-	-	-
Depreciation	-	(157,404)	(157,404)
Ending	₩ 22,088,083	₩ 4,280,663	₩ 26,368,746

[1] Increase due to capital expenditure

[2] Reclassified property, plant and equipment to investment property

[3] Some of the land were disposed in accordance with the regeneration project on industrial complex in Busan.

Rental income from investment property for the year ended December 31, 2019, is ₩ 1,088 million (2018: ₩ 589 million), and operating expenses (including repairs and maintenance) directly related to the investment property is ₩ 427 million (2018: ₩ 529 million). The Company holds no investment property that does not generate rental income.

As at December 31, 2019, the fair value of investment property amounts to ₩ 65,226 million (2018: ₩ 62,792 million).

The future minimum lease payments expected to be received in relation to the operating lease agreement for investment property as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	**2019**	**2018**
Within one year	₩ 840,072	₩ 647,320
Later than one year but not later than five years	234,000	123,584
	₩ 1,074,072	₩ 770,904

17. Intangible Assets

Details of intangible assets as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019			
	Goodwill	**Memberships**	**Others**	**Total**
Acquisition cost	₩ 3,957,673	₩ 14,553,624	₩ 1,242,373	₩ 19,753,670
Accumulated amortization and impairment losses	(3,543,896)	-	(782,385)	(4,326,281)
	₩ 413,777	₩ 14,553,624	₩ 459,988	₩ 15,427,389

(in thousands of Korean won)	2018			
	Goodwill	**Memberships**	**Others**	**Total**
Acquisition cost	₩ 3,957,673	₩ 13,937,547	₩ 1,336,173	₩ 19,231,393
Accumulated amortization and impairment losses	(3,543,896)	-	(701,917)	(4,245,813)
	₩ 413,777	₩ 13,937,547	₩ 634,256	₩ 14,985,580

Changes in intangible assets for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019			
	Goodwill	**Memberships**	**Others**	**Total**
Beginning	₩ 413,777	₩ 13,937,547	₩ 634,256	₩ 14,985,580
Acquisition	-	616,077	45,950	662,027
Disposal	-	-	-	-
Amortization	-	-	(220,218)	(220,218)
Ending	₩ 413,777	₩ 14,553,624	₩ 459,988	₩ 15,427,389

(in thousands of Korean won)	2018			
	Goodwill	**Memberships**	**Others**	**Total**
Beginning	₩ 3,957,673	₩ 13,965,881	₩ 536,164	₩ 18,459,718
Acquisition	-	77,666	306,300	383,966
Disposal	-	(106,000)	-	(106,000)
Amortization	-	-	(208,208)	(208,208)
Impairment	(3,543,896)	-	-	(3,543,896)
Ending	₩ 413,777	₩ 13,937,547	₩ 634,256	₩ 14,985,580

Amortization of ₩ 61 million (2018: ₩ 25 million) is included in 'cost of sales' in the statement of comprehensive income and ₩ 159 million (2018: ₩ 183 million) in 'selling and administrative expenses'.

Impairment Tests for Goodwill

Management reviews the business performance based on type of business. Goodwill is monitored by management at the cash-generating unit level.

The recoverable amount of all CGUs has been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the permanent growth rates stated below.

The following table sets out the key assumptions for those CGUs that have goodwill allocated to them, long-term growth rate and discount rate used in the value-in-use calculations.

(in thousands of Korean won)	**Key assumptions**
Sales volume (% annual growth rate)	0.94%
Sales price (% annual growth rate)	(-)0.93%
Gross margin (% of revenue)	12.95% ~ 14.20%
Other operating costs	1,424,154
Perpetual growth rate	-%
Pre-tax discount rate	8.77%

Sales volume is the average annual growth rate over the five-year forecast period. It is based on past performance and management's expectations of market development.

Sales price is the average annual growth rate over the five-year forecast period. It is based on current industry trends.

Gross margin is the average margin as a percentage of revenue over the five-year forecast period. It is based on the current sales margin levels and sales mix, with adjustments made to reflect the expected future price increases of raw materials, which management does not expect to pass on to customers through price increases.

Other operating costs are the fixed costs of the CGUs. Management forecasts these costs based on the current structure of the business, adjusting for inflationary increases and these do not reflect any future restructurings or cost saving measures. The amounts disclosed above are the average operating costs for the five-year forecast period.

Perpetual growth rate is the weighted average growth rate used to extrapolate cash flows beyond the budget period.

Pre-tax discount rates reflect specific risks relating to the relevant segments in which they operate.

The impairment test suggests that the carrying amount of cash generating units does not exceed the recoverable amount.

18. Trade Payables and Other Liabilities

Trade payables and other liabilities as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Current		
Trade payables	₩ 37,304,260	₩ 48,294,207
Other payables	10,238,399	5,176,118
Accrued expenses	12,478,631	12,434,073
Deposits received	410,000	250,000
	₩ 60,431,290	₩ 66,154,398
Non-Current		
Accrued expenses	₩ 363,285	₩ 241,099
Leasehold deposits	390,000	-
	753,285	241,099
	₩ 61,184,575	₩ 66,395,497

19. Other Financial Liabilities

Details of other financial liabilities as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Current		
Short-term borrowings	₩ 1,873,296	₩ 37,803,241
Current portion of bonds	19,976,247	29,991,792
	21,849,543	67,795,033
Non-current		
Bonds	59,823,472	49,810,765
Long-term borrowings	34,734,000	-
	94,557,472	49,810,765
	₩ 116,407,015	₩ 117,605,798

Details of borrowings from financial institutions as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	Creditor	Purpose	Maturity	Interest rate (%) Dec. 31, 2019	Amount 2019	Amount 2018
Short-term borrowings	KEB Hana Bank and 1 other	Transfer of trade receivables[1]	October 5, 2020	0.81 ~ 3.23	₩ 1,873,296	₩ 3,194,297
	NH Bank	Usance	-	-	-	4,608,944
	Shinhan Bank and others	Short-term CP	-	-	-	30,000,000
Long-term borrowings	Shinhan Bank	General[2]	September 16, 2022	3M LIBOR + 1.15%	₩ 34,734,000	₩ -
					₩ 36,607,296	₩ 37,803,241

[1] Trade receivables are pledged as collateral (Note 9).

[2] The Company has entered into a currency interest rate swaps contract to collect the won amount and pay the foreign currency amount on the contract settlement date, pay the fixed interest rate and collect the variable rate on the future interest payment date and pay the won amount and receive the foreign currency amount on the maturity date.(Note 11)

Details of bonds as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		Issuance	Maturity	Annual interest rate (%) Dec. 31, 2019	Amount 2019	Amount 2018
201st	Fixed rate in Korean won	Feb 26, 2016	Feb 26, 2019	2.61	-	30,000,000
202-1st	Fixed rate in Korean won	Jun 5, 2018	Jun 5, 2020	2.68	20,000,000	20,000,000
202-2nd	Fixed rate in Korean won	Jun 5, 2018	Jun 5, 2021	2.88	30,000,000	30,000,000
203rd	Fixed rate in Korean won	Feb 26, 2019	Feb 26, 2022	2.34	30,000,000	-
					₩ 80,000,000	₩ 80,000,000
Current portion of bonds					20,000,000	30,000,000
Discount on bonds					(23,752)	(8,208)
					₩ 19,976,248	₩ 29,991,792
Non-current bonds					60,000,000	50,000,000
Discount on bonds					(176,528)	(189,235)
					₩ 59,823,472	₩ 49,810,765

20. Other Current Liabilities

Other current liabilities as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Advance receipt from customers	₩	401,359	₩	97,167
Unearned revenue		1,710,905		152,374
Withholdings		2,540,202		1,934,774
	₩	4,652,466	₩	2,184,315

21. Net Defined Benefit Liabilities

21.1 Defined Benefit Plan

Details of net defined benefit liabilities recognized in the statements of financial position as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Present value of funded defined benefit obligations	₩	40,722,675	₩	38,929,502
Present value of unfunded defined benefit obligations		97,392		32,587
		40,820,067		38,962,089
Fair value of plan assets[1]		(25,356,147)		(20,479,091)
	₩	15,463,920	₩	18,482,998

[1] Contribution to the national pension fund of ₩ 5 million (2018: ₩ 5 million) is included in the fair value of plan assets as at December 31, 2019.

Changes in the defined benefit liabilities for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Beginning	₩	38,962,089	₩	35,420,714
Current service cost		4,151,729		3,713,914
Interest expense		982,623		1,039,169
Loss on settlement		-		14,835
Payments		(1,763,103)		(1,782,574)
Remeasurements:				
Actuarial loss (gain) arising from changes in financial assumptions		(890,662)		1,605,547
Actuarial gain arising from experience adjustments		(606,534)		(760,841)

Payment for settlement	-	(246,047)
Transfer	(16,075)	(42,628)
Ending	₩ 40,820,067	₩ 38,962,089

Changes in the fair value of plan assets for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Beginning	₩ 20,479,091	₩ 19,829,489
Interest income	523,891	611,828
Remeasurements:		
Return on plan assets	(106,832)	(304,740)
Contributions of employers	6,700,000	1,500,000
Benefit payments	(2,181,299)	(911,439)
Transfer	(58,704)	-
Payment for settlement	-	(246,047)
Ending	₩ 25,356,147	₩ 20,479,091

Plan assets as at December 31, 2019 and 2018, consist of:

(in thousands of Korean won)	2019		2018	
	Amount	Composition (%)	Amount	Composition (%)
Time deposits	₩ 25,351,586	100.0	₩ 20,474,530	100.0
Contribution to national pension plan	4,561	-	4,561	-
	₩ 25,356,147	100.0	₩ 20,479,091	100.0

The principal actuarial assumptions for the years ended December 31, 2019 and 2018, are as follows:

	2019	2018
Discount rate[1]	2.31 %	2.59%
Rate of future salary increases	4.30 %	4.99%
Rate of retirement	1.41 %	1.32%

[1] Discount rate is determined by reference to market yields at the end of every reporting period, on high quality corporate bond (unsecured publicly-subscribed corporate bond with ratings of AA+). Yields at maturity for the bonds which matches the average estimated timing of the pension payments was applied.

The sensitivity of the defined benefit obligations as at December 31, 2019, to changes in the principal actuarial assumptions is:

	Changes in principal assumptions	Impact on amount of liability
Discount rate	1% increase/decrease	7.32% decrease/ 8.53% increase
Rate of future salary increases	1% increase/decrease	8.36% increase/ 7.33% decrease

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations presented in the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis was not changed compared to the previous period.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2019, is as follows:

(in thousands of Korean won)	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
Benefit payments	₩ 1,923,464	₩ 4,141,207	₩ 12,351,516	₩ 31,379,468	₩ 49,795,655

The weighted average duration of the defined benefit obligations is 8.066 years.

21.2 Defined Contribution Plan

The expense recognized in the current period in relation to defined contribution plan was ₩ 3,077 thousand (2018: ₩ 12,103 thousand).

22. Income Tax Expense and Deferred Tax

Income tax expense for the years ended December 31, 2019 and 2018, consists of:

(in thousands of Korean won)	2019	2018
Current tax:		
Current tax on profits for the year	₩ 4,328,637	₩ 9,218,496
Adjustments in respect of prior years	-	(462,741)
	4,328,637	8,755,755
Deferred tax:		
Income taxes due to changes in temporary difference	2,357,270	(755,305)
Income tax expense	₩ 6,685,907	₩ 8,000,450

The tax on the Company's profit before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of consolidated entities as follows:

(in thousands of Korean won)		2019		2018
Profit before tax	₩	28,363,658	₩	27,321,527
Tax at domestic tax rates applicable to profits in the respective countries		6,552,007		6,311,273
Tax effects of:				
Expenses not deductible for tax purposes		375,601		422,810
Tax credit		(2,980)		(5,315)
Adjustment in respect of prior years		-		(72,647)
Additional tax		-		1,441,939
Others		(238,721)		(97,610)
Income tax expense	₩	6,685,907	₩	8,000,450
Effective tax rate		23.6%		29.3%

The tax effect relating to components of other comprehensive income for the years ended December 31, 2019 and 2018, is as follows:

(in thousands of Korean won)		2019				
		Before tax		Tax effect		After tax
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	₩	(402,394)	₩	92,953	₩	(309,441)
Remeasurements of net defined benefit liability		1,295,562		(299,275)		996,287
	₩	893,168	₩	(206,322)	₩	686,846

(in thousands of Korean won)		2018				
		Before tax		Tax effect		After tax
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	₩	(81,870)	₩	18,912	₩	(62,958)
Remeasurements of net defined benefit liability		(1,132,054)		261,504		(870,550)
	₩	(1,213,924)	₩	280,416	₩	(933,508)

The analysis of deferred tax assets and liabilities as at December 31, 2019 and 2018, is as follows:

(in thousands of Korean won)		2019		2018
Deferred tax assets				
To be recovered after more than 12 months	₩	14,330,484	₩	15,462,073
To be recovered within 12 months		1,944,351		1,975,724
		16,274,835		17,437,797

Deferred tax liabilities		
To be recovered after more than 12 months	(5,856,217)	(4,729,617)
To be recovered within 12 months	(279,613)	(5,583)
	(6,135,830)	(4,735,200)
Deferred tax assets (liabilities), net	₩ 10,139,005	₩ 12,702,597

Changes in deferred tax assets and liabilities for the years ended December 31, 2019 and 2018, without taking into consideration the offsetting of balances within the same tax jurisdiction, are as follows:

(in thousands of Korean won)	2019			
	Beginning	**Statement of profit or loss**	**Other comprehensive income**	**Ending**
Deferred tax liabilities				
Plan assets	₩ (4,729,617)	₩ (1,151,278)	₩ 24,678	₩ (5,856,217)
Gain on valuation of derivatives instruments	(2,111)	(239,313)	-	(241,424)
Interest income	(5,584)	(24,215)	-	(29,799)
Gain on valuation of short-term financial instruments	-	(8,390)	-	(8,390)
	(4,737,312)	(1,423,196)	24,678	(6,135,830)
Deferred tax assets				
Defined benefit obligation	8,999,189	753,146	(323,953)	9,428,382
Depreciation	1,389,530	(816,959)	-	572,571
Impairment loss	1,173,043	1,794,516	-	2,967,559
Valuation on inventories	1,531,971	(503,105)	-	1,028,866
Accrued expenses	405,426	75,439	-	480,865
Long-term deposits	147,840	-	-	147,840
Other provision	2,647,290	(2,492,633)	-	154,657
Valuation of derivatives instruments	-	434,622	-	434,622
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	55,750	(40,441)	92,953	108,262
Impairment loss on intangible assets	635,796	(182,844)	-	452,952
Other	454,074	44,185	-	498,259
	17,439,909	(934,074)	(231,000)	16,274,835
	₩ 12,702,597	₩ (2,357,270)	₩ (206,322)	₩ 10,139,005

(in thousands of Korean won)	2018			
	Beginning	**Statement of profit or loss**	**Other comprehensive income**	**Ending**
Deferred tax liabilities				
Plan assets	₩ (4,579,559)	₩ (220,453)	₩ 70,395	₩ (4,729,617)
Interest income	(4,436)	(1,148)	-	(5,584)
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	(3,602)	-	3,602	-
	(4,587,597)	(221,601)	73,997	(4,735,201)
Deferred tax assets				
Defined benefit obligation	8,181,131	626,948	191,109	8,999,188
Depreciation	1,526,791	(137,261)	-	1,389,530
Impairment loss	288,492	884,551	-	1,173,043
Valuation on inventories	1,278,403	253,568	-	1,531,971
Accrued expenses	1,480,588	(1,075,163)	-	405,425
Long-term deposits	147,840	-	-	147,840
Other provision	2,556,107	91,183	-	2,647,290
Valuation of derivatives instruments	227,263	(229,374)	-	(2,111)
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	44,739	(4,298)-	15,310	55,750
Impairment loss on intangible assets	-	635,796	-	635,796
Other	523,118	(69,044)	-	454,074
	16,254,472	976,906	206,419	17,437,797
	₩ 11,666,875	₩ 755,305	₩ 280,416	₩ 12,702,596

Deferred income tax assets are recognized for tax loss carryforwards and tax credit carryforwards when the realization of the related tax benefit through future taxable income is probable. There are no deferred income tax assets that the Company has not recognized.

23. Contingencies and Commitments

Details of commitments with financial institutions as at December 31, 2019, are as follows:

(in thousands of Korean won and in USD)		Currency	Limit
Notes receivable discounting	KEB Hana Bank	KRW	38,000,000
Trade receivable factoring	Kookmin Bank and others	KRW	40,000,000
Purchase financing	Standard Chartered Bank Korea., Ltd.	KRW	10,000,000
General financing	NH Bank and others	KRW	90,000,000
Comprehensive finance limit	Shinhan Bank	KRW	20,000,000
Import financing	Korea EXIM Bank	USD	46,000,000
Opening of L/C and others[1]	Woori bank and others	USD	163,054,395

[1] The Company is provided with payment guarantees for the opening of letters of credit from financial institutions.

Details of significant litigations as at December 31, 2019, are as follows:

(in thousands of Korean won)	Counterparty	Contents	Amount	Outcome
As a defendant				
Supreme court of Republic of Korea	18 employees	Ordinary wages	₩ 248,935	Third trial in progress
Chang-won local court	12 employees	Ordinary wages	12,000	First trial in progress

The Company recognized provision of ₩ 670 million in relation to these lawsuits. The final payables may differ from the provision based on the outcome of the lawsuit (Note 24).

The Company is provided with payment guarantees of ₩ 2,346 million by Seoul Guarantee Insurance Corp and others in relation to approval and warranties.

The Company has entered into an agreement for using e-factoring system with Hyundai Commercial Inc. which allows the supplier to request advances from a financial institution prior to collection of receivables due from the Company by providing the receivables due from the Company as collateral.

24. Other Provision

(in thousands of Korean won)	**Provision for general wages**			
		2019		**2018**
Beginning	₩	11,460,134	₩	11,065,401
Additional provisions		1,813,500		938,879
Used provisions		(6,012,183)		(544,146)
Reversal		(6,591,935)		-
Ending	₩	669,516	₩	11,460,134

At the end of the reporting period, lawsuits have been filed by employees against the Company asserting that the Company has to pay the employees in relation to general wages issues (₩ 261 million). The Company recognizes provision of ₩ 670 million. The final payables may differ from the provision based on the outcome of the lawsuit

25. Share Capital

Details of share capital as at December 31, 2019, are as follows:

	Ordinary shares	**Preferred shares**
Shares to be issued	120,000,000 shares	40,000,000 shares
Par value	₩ 5,000	₩ 5,000
Outstanding shares	15,078,811 shares	109,852 shares
Share capital	₩ 75,394,055 thousand	₩ 549,260 thousand

There are no changes in share capital for the year ended December 31, 2019.

The 109,852 shares of preferred share have no voting rights and are entitled to non-cumulative and non-participating preferred dividends at a rate of one percent over those for common shares. Voting rights on preferred shares will be allowed when dividend is not declared on preferred shareholders. In accordance with the Company's Articles of Incorporation, the Company is also authorized to grant stock options to directors and employees up to 15% of the total outstanding shares of the Company, upon obtaining approval from the Board of Directors. As at December 31, 2019, no stock options are granted under such terms.

26. Retained Earnings

Retained earnings as at December 31, 2019 and 2018, consist of:

(in thousands of Korean won)		2019		2018
Legal reserves[1]	₩	1,476,758	₩	1,324,322
Discretionary reserves		100,922,491		100,922,491
Unappropriated retained earnings		223,809,760		202,812,516
	₩	326,209,009	₩	305,059,329

[1] The Commercial Code of the Republic of Korea requires the Company to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its share capital. The reserve is not available for cash dividends payment, but may be transferred to share capital or used to reduce accumulated deficit. When the accumulated legal reserves (the sum of capital reserves and earned profit reserves) are greater than 1.5 times the paid-in capital amount, the excess legal reserves may be distributed (in accordance with a resolution of the shareholders' meeting).

The appropriation of retained earnings for the year ended December 31, 2019, is expected to be appropriated at the shareholders' meeting on March 25, 2020. The appropriation date for the year ended December 31, 2018, was March 15, 2019.

The appropriation of retained earnings for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Unappropriated retained earnings carried over from prior year	₩ 201,135,721	₩ 184,361,988
Remeasurements of net defined benefit liability	996,287	(870,549)
Profit for the year	21,677,751	19,321,077
	223,809,759	202,812,516
Appropriation of retained earnings		
Legal reserves	152,436	152,436
Dividends (Cash dividend (%):	1,524,359	1,524,359
Ordinary share:		
2019: ₩ 100 (2%)		
2018: ₩ 100 (2%),		
Preferred share:		
2019: ₩ 150 (3%)		
2018: ₩ 150 (3%))		
	1,676,795	1,676,795
Unappropriated retained earnings carried forward to subsequent year	₩ 221,132,964	₩ 201,135,721

27. Other Components of Equity

Details of other components of equity as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Loss on valuation of equity instruments at fair value through other comprehensive income	₩	(360,406)	₩	(50,965)

28. Revenue from Contracts with Customers and Relevant Contract Assets and Liabilities

28.1 Revenue from Contracts with Customers

The Company derives revenue from the transfer of goods and services over time and at a point in time in the following major business segments:

(in thousands of Korean won)		2019				
		Domestic		Export		Total
Inter-segment revenue						
Revenue from external customers	₩	625,822,512	₩	106,994,042	₩	732,816,554
Timing of revenue recognition						
At a point in time		625,822,512		104,395,578		730,218,090
Over time		-		2,598,464		2,598,464

(in thousands of Korean won)		2018				
		Domestic		Export		Total
Inter-segment revenue						
Revenue from external customers	₩	584,051,774	₩	127,941,069	₩	711,992,843
Timing of revenue recognition						
At a point in time		584,051,774		124,726,787		708,778,561
Over time		-		3,214,282		3,214,282

28.2 Assets and Liabilities related to Contracts with Customers

The Company has recognized the following contract assets and liabilities:

(in thousands of Korean won)		2019		2018
Contract assets relating to transport service contracts	₩	239,961	₩	144,976
Contract liabilities - transport service contracts		222,259		152,374
Contract assets – refund assets		686,796		-
Contract liabilities – refund liabilities		1,488,646		-

29. Expenses by Nature

Details of expenses by nature for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Changes in finished goods and work in progress	₩ 8,161,909	₩ (5,663,148)
Merchandise sold	156,981,035	112,309,948
Raw materials and supplies used	439,472,627	462,431,357
Employee benefit expenses	36,813,997	41,158,270
Depreciation and amortization	14,875,288	17,736,976
Transportation expenses	11,619,202	10,778,777
Utilities	15,672,841	15,783,780
Others	12,836,410	22,615,942
Total of cost of sales, selling, general and administrative expenses, and distribution costs	₩ 696,433,309	₩ 677,151,902

30. Selling and Administrative Expenses

Details of selling and administrative expenses for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Salaries	₩	12,234,512	₩	11,374,257
Post-employment benefits		2,176,759		1,916,446
Employee welfare benefits		1,793,309		2,141,173
Service fees		5,309,233		3,528,724
Depreciation		1,918,381		810,019
Amortization		158,958		182,683
Research and development		139,189		98,606
Operational expenses		1,751,545		1,940,786
Repair and maintenances		321,276		618,453
Outsourcing		865,482		857,589
Travel		847,474		1,002,543
Others		2,456,233		2,489,337
	₩	29,972,351	₩	26,960,616

31. Other Income and Expenses

Details of other income and expenses for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Other income				
Interest income	₩	632,165	₩	798,743
Rental income		1,392,569		989,973
Gain on foreign currency transactions		2,680,734		2,787,814
Gain on foreign currency translations		32,167		186,965
Gain on valuation of financial assets at fair value through profit or loss		36,320		18,607
Gain on valuation of derivatives		-		29,374
Gain on transactions of derivatives		697,413		1,704,995
Gain on disposal of property, plant and equipment		14,363		19,764
Gain on disposal of investment property		1,064,449		-
Miscellaneous gain		1,801,243		1,865,307
	₩	8,351,423	₩	8,401,542

(in thousands of Korean won)		2019		2018
Other expenses				
Other interest expenses	₩	6,570	₩	-
Loss on foreign currency transactions		2,659,485		2,132,947
Loss on foreign currency translations		78,614		99,523
Other impairment on receivables		-		16,915
Depreciation of investment property		158,851		157,404
Loss on disposal of financial assets at fair value through profit or loss		71,667		-
Loss on disposal of trade receivables		471,896		557,813
Impairment loss on property, plant, and equipment		8,327,727		3,834,798
Loss on disposal of property, plant and equipment		539,123		159,324
Impairment loss on intangible assets		-		3,543,896
Loss on valuation of derivatives		43,121		20,234
Loss on transactions of derivatives		579,133		145,875
Donations		292,876		235,000
Miscellaneous losses		993,841		857,281
	₩	14,222,904	₩	11,761,010

32. Finance Income and Costs

Finance income and costs for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Finance income				
Interest income	₩	512,215	₩	300,170
Gain on valuation of derivatives		1,045,127		–
Gain on transactions of derivatives		298,256		–
Gains on foreign currency transactions		462,943		1,337,865
Gains on foreign currency translations		810,975		71,403
	₩	3,129,516	₩	1,709,438
Finance cost				
Interest expense	₩	3,103,725	₩	3,287,461
Loss on valuation of derivatives		1,838,359		–
Loss on foreign currency transactions		252,824		2,531,521
Loss on foreign currency translations		82,715		50,401
	₩	5,277,623	₩	5,869,383

33. Earnings per Share

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year excluding ordinary shares purchased by the Company and held as treasury shares. Preferred shareholders are entitled to non-cumulative and non-participating preferred dividends at a rate without ceiling and have rights to participate in profit sharing. The Company includes the said preferred shares in its earnings per share calculation. Details of earnings per share calculation by stock types are presented below.

Basic earnings per share for ordinary shares for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	**2019**	**2018**
Net earnings	₩ 21,515,514	₩ 19,175,884
Weighted average number of ordinary shares outstanding	15,078,811 shares	15,078,811 shares
Basic earnings per ordinary share (*in Korean won)*	₩ 1,427	₩ 1,272

Basic earnings per share for preferred shares for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	**2019**	**2018**
Net earnings attributable to preferred stock	₩ 162,267	₩ 145,193
Weighted average number of preferred shares outstanding	109,852 shares	109,852 shares
Basic earnings per preferred share (*in Korean won)*	₩1,477	₩ 1,322

The Company did not issue any potential ordinary shares. Therefore, basic earnings per share is identical to diluted earnings per share.

34. Cash Flows from Operations

Adjustments to the cash flows from operations for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		**2019**		**2018**
Profit before income tax	₩	28,363,658	₩	27,321,527
Adjustments for:				
Interest income		(1,144,379)		(1,098,914)
Interest expenses		3,110,295		3,287,461
Depreciation		14,517,285		17,528,768
Depreciation of investment property		158,851		157,404
Depreciation of right-of-use assets		137,785		-
Amortization		220,218		208,208
Other impairment on receivables		-		16,915
Post-employment benefits		4,586,837		4,146,974
Gain on foreign currency translations		(843,143)		(258,367)
Loss on foreign currency translations		161,330		149,924
Loss on disposal of trade receivables		471,896		557,813
(Reversal of) Loss on valuation of inventories		(2,177,944)		1,097,697
Gain on disposal of investment property(land)		(1,064,449)		-
Gain on disposal of property, plant and equipment		(14,363)		(19,764)
Loss on disposal of property, plant and equipment		539,123		159,324
Impairment loss on property, plant and equipment		8,327,727		3,834,798
Impairment loss on intangible assets		-		3,543,896
Gain on valuation of derivatives		(1,045,127)		(29,374)
Loss on valuation of derivatives		1,881,480		20,234
Gain on valuation of financial assets at fair value through profit or loss		(36,320)		(18,607)
Loss on disposal of financial assets at fair value through profit or loss		71,667		-
Additional other provisions (reversal)		(4,778,435)		938,879
Others		73,160		64,804
Movements in working capital accounts :				
Decrease (Increase) in trade receivables		(11,650,314)		5,717,332
Decrease (Increase) in other receivables		(815,078)		1,054,294
Increase in advance payments		(1,246,290)		(546,461)
Increase in prepaid value added tax		(229,347)		(124,563)
Increase in prepaid expenses		(707,522)		(203,003)
Decrease (increase) in other quick assets		10,052		(2,631)
Decrease (increase) in derivatives		9,140		(983,822)

(in thousands of Korean won)		**2019**		**2018**
Decrease (increase) in inventories		27,993,855		(35,914,559)
Decrease in trade payables		(10,970,482)		(5,755,208)
Increase (decrease) in advance received		304,192		(188,175)
Increase in unearned revenue		1,558,531		152,374
Increase in withholdings		605,428		935,465
Decrease in value added tax withheld		-		(521,798)
Increase in other payables		57,336		993,932
Increase (decrease) in accrued expenses		35,153		(3,329,431)
Decrease in deposits received		-		(179,400)
Increase in long-term accrued expenses		27,384		33,261
Post-employment benefit payment		460,824		(913,763)
Payment of plan assets		(6,700,000)		(1,500,000)
Decrease in other provisions		(6,012,183)		(544,145)
	₩	44,247,831	₩	19,789,299

Major non-cash transactions for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		**2019**		**2018**
Construction-in-progress reclassification	₩	23,646,955	₩	4,240,959
Machinery in transit reclassification		533,696		5,328,993
Transfer of bonds payable to current position		19,944,440		30,000,000
Transfer of investment bonds to current position		-		5,000,000
Transfer of lease liabilities to current position		121,109		-
Receivables and non-trade receivables written off		266,428		53,939
Transfer of long-term trade receivables to current position		1,055,000		848,000
Transfer of long-term loans to current position		120,000		-
Transfer of long-term other payables to current position		-		50,000
Other payables of acquisition of property, plant and equipment		-		(401,757)
Transfer of financial assets at fair value through profit or loss to financial assets at fair value through other comprehensive income		753,270		-
Transfer of inventories to construction-in-progress		78,228		-
Transfer of property, plant and equipment-building to investment property-building		181,843		-
Transfer of accumulated depreciation of property, plant and equipment-buildings to accumulated depreciation of investment property		76,374		-
Transfer of accumulated impairment losses of property, plant and equipment to accumulated impairment losses on investment property-building		55,008		-
Acquisition of right-of-use assets and increase in		448,149		-

lease liabilities		
Disposal of right-of-use assets and repayment of lease liabilities	312,819	-

Changes in liabilities arising from financial activities for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	**2019**					
	Liabilities from financing activities					
	Short-term borrowings	**Current portion of bonds payable**	**Long-term borrowings**	**Bonds payable**	**Lease liabilities**	**Total**
At January 1, 2019	₩ 37,803,241	₩ 29,991,792	₩ -	₩ 49,810,765	₩ -	₩ 117,605,798
Cash flows	(35,905,196)	(30,000,000)	35,520,000	29,848,320	(141,900)	(536,876)
Exchange differences	(24,749)	-	(786,000)	-	-	(810,749)
Other non-financial changes	-	19,984,455	-	(19,835,613)	141,900	148,842
At December 31, 2019	₩ 1,873,296	₩ 19,976,247	₩ 34,734,000	₩ 59,823,472	₩ -	₩ 116,407,015

(in thousands of Korean won)	**2018**			
	Liabilities from financing activities			
	Short-term borrowings	**Current portion of bonds payable**	**Bonds payable**	**Total**
At January 1, 2018	₩ 47,776,847	₩ 29,973,731	₩ 29,939,571	₩ 107,690,149
Cash flows	(9,902,428)	(30,000,000)	49,755,340	9,852,912
Exchange differences	(71,178)	-	-	(71,178)
Other non-financial changes	-	30,018,061	(29,884,146)	133,915
At December 31, 2018	₩ 37,803,241	₩ 29,991,792	₩ 49,810,765	₩ 117,605,798

35. Related Party Transactions

Details of related party as at December 31, 2019 and 2018, are as follows:

	Percentage of common ownership (%)	
	2019	**2018**
Parent Company		
Hyundai Steel Co., Ltd.	41.12	41.12

Details of subsidiary as at December 31, 2019 and 2018, are as follows:

	Percentage of common ownership (%)	
	2019	**2018**
Subsidiary		
Hyundai BNG Steel USA, INC.	100	100

Other related parties include Hyundai Materials Corp., HYUNDAI MATERIALS JAPAN CORP., KIA Motors Corporation and so on.

As Hyundai Motor Co., Ltd. and Hyundai Rotem Corp. etc. are not related parties of the Company in accordance with Korean IFRS 1024, and belongs to the Large Enterprise Group, to which the Company also belongs in accordance with the Monopoly Regulation and Fair Trade Act. These entities are classified to other.

The Company has entered into a group brand usage agreement with Hyundai Motor Co., Ltd., Hyundai Mobis Co., Ltd and Hyundai Engineering & Construction Co., Ltd, and paid ₩ 882 million as a brand royalty during the year ended December 31, 2019.

Sales and purchases with related parties for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019				
	Sales	**Other income and others**	**Purchase**	**Other expenses and others**	**Acquisition of property, plant and equipment**
Subsidiary					
Hyundai BNG Steel USA. INC	₩ -	₩ 3,312	₩ -	₩ 559,416	₩ -
Other related parties					
Kia Motors Corporation	62,021,852	173,745	-	28,965	6,033,921
Hyundai Materials Corp.	-	227,928	83,102,753	6,256,917	33,370
HYUNDAI MATERIALS JAPAN CORP.	816,035	-	-	7,406	-
Other[1]					
Hyundai Motor Co., Ltd.	95,449,640	-	-	618,487	200,719
Hyundai Rotem Corp.	25,503,531	-	-	-	-
Hyundai Engineering & Construction Co., Ltd	-	-	-	90,528	-
Hyundai Mobis Co., Ltd	-	-	-	199,887	-
Hyundai Autoever Corporation.	-	-	-	1,648,892	77,729
Hyundai Engineering Co., Ltd	-	-	-	160,086	-
Hyundai Wia	493,209	-	-	-	-
Hyundai Motor Securities Co., Ltd.	-	-	-	108,740	-

Haevichi Hotels&Resorts Co.,Ltd.	-	-	-	2,400	-
Haevichi Country Club., Ltd	-	-	-	109,130	-
Hyundai Card Co., Ltd.	-	22,041	-	6,800	-

[1] The Company issued ₩ 30,000 million of 203rd unsecured publicly-subscribed corporate bond in 2019 and ₩ 10,000 million was acquired and brokered by HMC Investment & Securities Co., Ltd., which was classified as other. The amount was not included in the above sales and purchases transactions.

(in thousands of Korean won)	2018				
	Sales	**Other income and others**	**Purchase**	**Other expenses and others**	**Acquisition of property, plant and equipment**
Parent company					
Hyundai Steel Co., Ltd.	₩ 156,070	₩ 59,311	₩ 185,540	₩ -	₩ -
Subsidiary					
Hyundai BNG Steel USA. INC	-	30,368	-	530,644	-
Other related parties					
Kia Motors Corporation	68,252,822	-	-	34,011	195,370
Hyundai Materials Corp.	-	163,109	118,053,452	5,630,759	-
HYUNDAI MATERIALS JAPAN CORP.	1,027,147	-	62,456	5,054	-
Other					
Hyundai Motor Co., Ltd.	106,358,439	-	-	749,998	-
Hyundai Rotem Corp.	23,924,036	-	-	-	-
Hyundai Engineering & Construction Co., Ltd	-	-	-	122,263	-
Hyundai Mobis Co., Ltd	-	-	-	241,910	-
Hyundai Autoever Corporation.	-	-	-	1,807,750	134,697
Hyundai Engineering Co., Ltd	-	-	-	149,676	-
Hyundai Wia	329,216	-	-	-	-
Hyundai Motor Securities Co., Ltd.	-	-	-	103,369	-
Haevichi Country Club., Ltd	-	-	-	109,130	-
Hyundai Card Co., Ltd.	-	-	-	6,600	-

[1] The Company issued ₩ 20,000 million of 202-1st unsecured publicly-subscribed corporate bond in 2019 and ₩ 10,000 million was acquired and brokered by HMC Investment & Securities Co., Ltd., which was classified as other. The amount was not included in the above sales and purchases transactions.

Outstanding balances arising from sales/purchases of goods and services as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019			
	Receivables		Payables	
	Trade receivables	Others	Trade payables	Others
Subsidiary				
Hyundai BNG Steel USA. INC	₩ -	₩ -	₩ -	₩ 46,312
Other related parties				
Kia Motors Corporation	10,085,534	-	-	6,639,567
Hyundai Materials Corp.	-	32,154	2,785,776	746,361
Other				
Hyundai Motor Co., Ltd.	18,707,461	-	-	124,282
Hyundai Rotem Corp.	8,459,383	-	-	-
Hyundai Engineering & Construction Co., Ltd	-	-	-	26,783
Hyundai Mobis Co., Ltd	-	-	-	54,861
Hyundai Autoever Corporation.	-	716,603	629,196	267,437
Hyundai Engineering Co., Ltd	-	-	-	14,056
Hyundai Wia	541,437	-	-	-
Hyundai Card Co., Ltd.	-	-	-	481,659

(in thousands of Korean won)	2018			
	Receivables		Payables	
	Trade receivables	Others	Trade payables	Others
Subsidiary				
Hyundai BNG Steel USA. INC	₩ -	₩ -	₩ -	₩ 44,724
Other related parties				
Kia Motors Corporation	11,098,826	-	-	2,792
Hyundai Materials Corp.	-	16,456	4,941,690	520,541
HYUNDAI MATERIALS JAPAN CORP.	165,732	-	-	31,332
Other				
Hyundai Motor Co., Ltd.	14,540,086	-	-	128,194
Hyundai Rotem Corp.	10,129,355	-	-	-
Hyundai Engineering & Construction Co., Ltd	-	-	-	28,671
Hyundai Mobis Co., Ltd	-	-	-	54,752
Hyundai Autoever Corporation.	-	17,147	194,699	266,572
Hyundai Engineering Co., Ltd	-	-	-	12,758
Hyundai Wia	13,771	-	-	-
Hyundai Card Co., Ltd.	-	-	-	498,896

Fund transactions with related parties for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019			
		Loan transactions		
Type	Opening Balance	Loans	Exchange differences	Ending Balance
Subsidiary	₩ 670,860	₩ -	₩ (670,860)	₩ -

(in thousands of Korean won)

	2018			
		Loan transactions		
Type	Opening Balance	Loans	Exchange differences	Ending Balance
Subsidiary	₩ 642,840	₩ -	₩ 28,020	₩ 670,860

Key management compensation

Key management includes directors (registered and non-registered), members of the board of directors and the head of internal audit. The compensation paid or payable to key management for employee services for the years ended December 31, 2019 and 2018, are shown below:

(in thousands of Korean won)	2019	2018
Salaries	₩ 5,635,458	₩ 4,950,648
Post-employment benefits	1,344,813	1,290,678
	₩ 6,980,271	₩ 6,241,326

36. Changes in Accounting Policies

36.1 Adoption of Korean IFRS 1116 *Lease*

As explained in Note 2, the Company has adopted Korean IFRS 1116, retrospectively, from January 1, 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are, therefore, recognized in the separate statement of financial position on January 1, 2019

(a) Adjustments recognized from the adoption of Korea IFRS 1116 *Lease*
On adoption of Korean IFRS 1116, the Company recognized lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of Korean IFRS 1017. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as at January 1, 2019. The lessee's weighted average incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 2.65%.

(in thousands of Korean won)		**2019**
Operating lease commitments disclosed as at December 31, 2018	₩	580,423
Discounted using the lessee's incremental borrowing rate of at the date of initial application		563,962
Less: short term leases recognized as expenses on straight-line basis		(81,331)
Less: low-value leases recognized as expenses on straight-line basis		(181,416)
Lease liability recognized as at January 1, 2019		301,215
Of which are:		
Current lease liabilities		148,614
Non-current lease liabilities		152,601
	₩	301,215

The Company only has associated right-of-use assets for property leases, and they were measured on a retrospective basis as if the new rules had always been applied. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

(i) Amounts recognized in the separate statement of financial position

The separate statement of financial position shows the following amounts relating to leases:

(in thousands of Korean won)	**December 31, 2019**[1]	**January 1, 2019**
Right-of-use assets[2]		
Properties	₩ -	₩ 301,215

[1]There are no right-of-use assets to be recognized as a result of the termination of the lease agreements for the year ended December 31, 2019

[2]Included in 'property, plant and equipment' in the statement of financial position.

(in thousands of Korean won)	**December 31, 2019**[1]	**January 1, 2019**
Lease liabilities[2]		
Current	₩ -	₩ 148,614
Non-current	-	152,601
	₩ -	₩ 301,215

[1]There are no lease liabilities to be recognized as a result of the termination of the lease agreements for the year ended December 31, 2019

[2]Included in 'other financial liabilities' in the statement of financial position.

(ii) Amounts recognized in the separate statement of profit or loss

The separate statement of profit or loss shows the following amounts relating to leases:

(in thousands of Korean won)	**2019**	**2018**
Depreciation of right-of-use assets		
Properties	₩ 137,785	₩ -
Interest expense relating to lease liabilities (included in other expenses)	6,570	-
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	682,406	891,906
Expense relating to leases of low-value assets that are not short-term leases (included in administrative expenses)	126,019	80,127

(iii) Practical expedients applied

In applying Korean IFRS 1116 for the first time, the Company has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics
- the accounting for operating leases with a remaining lease term of less than 12 months as at January 1, 2019, as short-term leases, and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease

The Company has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date, the Company relied on its assessment made applying Korean IFRS 1017 and Interpretation 2104 *Determining whether an Arrangement contains a Lease*.

Report on Independent Auditor's
Review of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

To the President of
HYUNDAI BNG STEEL CO., LTD.

We have reviewed the accompanying management's report on the effectiveness of Internal Control over Financial Reporting ("ICFR") of HYUNDAI BNG STEEL CO., LTD. (the "Company") as at December 31, 2019. The Company's management is responsible for designing and operating ICFR and for its assessment of the effectiveness of ICFR. Our responsibility is to review the management's report on the effectiveness of ICFR and issue a report based on our review. The management's report on the effectiveness of ICFR of the Company states that "Based on the assessment results, the President and ICFR Officer believe that the Company's ICFR, as at December 31, 2019, is designed and operating effectively, in all material respects, in conformity with the Best Practice Guideline"

Our review was conducted in accordance with ICFR review standards established by the Korean Institute of Certified Public Accountants. Those standards require that we plan and perform, in all material respects, the review of management's report on the effectiveness of ICFR to obtain a lower level of assurance than an audit. A review is to obtain an understanding of a company's ICFR and consists principally of inquiries of management and, when deemed necessary, a limited inspection of underlying documents, which is substantially less in scope than an audit.

A company's ICFR is a system to monitor and operate those policies and procedures designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as adopted by the Republic of Korea. Because of its inherent limitations, ICFR may not prevent or detect a material misstatement of the financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on our review, nothing has come to our attention that causes us to believe that management's report on the effectiveness of ICFR, referred to above, is not presented fairly, in all material respects, in accordance with the Best Practice Guideline.

Our review is based on the Company's ICFR as at December 31, 2019, and we did not review management's assessment of its ICFR subsequent to December 31, 2019. This report has been prepared pursuant to the Acts on External Audit for Stock Companies, etc. in Korea and may not be appropriate for other purposes or for other users.

Samil PricewaterhouseCoopers

March 6, 2020

Report on the Effectiveness of
Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

To the Shareholders, Board of Directors and Audit Committee of
HYUNDAI BNG STEEL CO., LTD.

We, as the President, and the Internal Control over Financial Reporting ("ICFR") Officer of HYUNDAI BNG STEEL CO., LTD. ("the Company"), assessed the effectiveness of the design and operation of the Company's Internal Control over Financial Reporting for the year ended December 31, 2019.

The Company's management, including ourselves, is responsible for designing and operating ICFR. We assessed the design and operating effectiveness of ICFR in the prevention and detection of an error or fraud which may cause material misstatements in the preparation and disclosure of reliable financial statements. We followed the 'Best Practice Guideline' which is established by the Operating Committee of Internal Control over Financial Reporting in Korea (the "ICFR Committee") to evaluate the effectiveness of ICFR design and operation.

Based on the assessment results, we believe that the Company's ICFR, as at December 31, 2019, is designed and operating effectively, in all material respects, in conformity with the Best Practice Guideline.

We certify that this report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statement which cause material misunderstandings, and we have reviewed and verified this report with sufficient due care.

January 22, 2020

Jeong, Il Sun, President

Ji, Jae Gu, Internal Control over Financial Reporting Officer